Principles and Practice of ACCOUNTANCY

VOL. II

N. D. KAPOOR

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PRINCIPLES AND PRACTICE OF ACCOUNTANCY

VOLUME II

(Covering the Syllabus of Accounting III & IV)

Based on the latest syllabus of Central Board of Secondary Education, New Delhi for Class XII of Senior School Certificate Examination

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PREFACE

The Central Board of Secondary Education, New Delhi has introduced the new Syllabus in Accounting from the academic session 1989-90 for the Plus Two Stage. The present Book has been prepared according to the syllabus prescribed by the Central Board of Secondary Education, New Delhi, in the subject of Accountancy. Volume I (comprising Accounting I and II) is meant for Class XI and Volume II (comprising Accounting III and IV) is meant for Class XII.

The important features of the Book (Volume II) are as follows :

The treatment of the subject is simple as well as exhaustive. At places it is repetitive. This is to help the student to learn certain concepts as a matter of habit. As such, there has been more of emphasis on practical aspect of the subject. Accounting III contains 134 Solved Illustrations and 268 Practical Exercises in addition to 110 Theory Questions for general discussion. Working notes, where necessary, have been appended to solutions. Illustrations and Practical Exercises have been graded in such a manner that a student can learn the subject independently. Accounting IV likewise contains 85 Solved Illustrations and Practical Exercises. The unit-wise break-up of Illustrations, and 102 Practical Exercises and Theory Questions is as follows :

	Illustrations	Practical Exercises	Theory Questions
Unit 1	60	162	64
Unit 2	60	92	36
Unit 3	14	14	10
Unit 4	—	—	12
Unit 5	48	54	25
Unit 6	22		
Unit 7	6	8	10
Unit 8	9	9	12

It is highly innovative of the Board to have introduced the topic of Analysis of Financial Statements at this stage of the study of the subject. This topic is a test ground of what a student has really learnt and the extent to which he has grasped and assimilated the subject. This will also give him an idea as to how financial data is to be analysed and interpreted. In the modern competitive world, the ability to analyse and interpret financial data is an assential tool for a successful manager.

Suggestions for the improvement of the book will be thankfully received and acknowledged.

AUTHOR

Syllabus in Accountancy (Accounting III & IV) for Class XII prescribed by Central Board of Secondary Education, New Delhi.

One Paper : 100 Marks	*3 Hours*	*Marks*

Unit 1 : Accounting for Partnership Firms (*27 marks*)

Nature of partnership firm. Partnership deed (meaning, impact on accounting treatment).

Special aspects of partnership accounts : (*a*) Fixed vs. fluctuating capital ; (*b*) Division of profits among partners ; (*c*) Past adjustments and guarantees ; (*d*) Change in the profit-sharing ratios of existing partners.

Admission of a partner : (*a*) Effects of admission of a partner ; (*b*) Change in profit-sharing ratio—sacrificing ratio to be emphasized ; (*c*) Goodwill : nature, methods of calculation : average profit, super profit, capitalisation, accounting treatment ; (*d*) Need for revaluation of assets and liabilities—accounting treatment.

Retirement/Death of a partner : (*a*) Change in profit-sharing ratio (emphasis on gaining ratio) ; (*b*) Share of capital ; (*c*) Share of goodwill and accumulated profits/reserves ; (*d*) Joint life policy.

Dissolution of a partnership firm : (*a*) Meaning ; (*b*) Settlement of accounts : Preparation of realization account and related accounts (excluding piecemeal distribution, sale to a company and insolvency of a partner).

Unit 2 : Company Accounts (*18 marks*)

Nature of a company.

Accounting for share capital : (*a*) Issue and allotment of shares : entries to be passed for application, allotment and calls ; (*b*) Over-subscription and under-subscription ; (*c*) Issue at par, at a premium, at a discount ; (*d*) Calls in advance—permissibility, accounting entries ; (*e*) Calls in arrears.

Forfeiture of shares due to non-payment of calls : (*a*) Accounting treatment ; (*b*) Re-issue of forfeited shares—at par, at a premium, and at a discount—accounting treatment.

Issue of debentures : (*a*) Meaning of debenture ; (*b*) Nature of debenture capital (loan capital) ; (*c*) Issue of debentures at par, at a discount and at a premium ; (*d*) Debentures as a collateral security ; (*e*) Debentures interest—concept of periodic payment.

Redemption of debentures : (*a*) Meaning ; (*b*) Accounting entries—issue at par and redeemable at par, issue at discount and redeemable at par, issue at premium and redeemable at par, issue at par and redeemable at premium, issue at discount and redeemble at premium ; (*c*) Treatment of discount/loss on the issue of debentures ; (*d*) Sources of redemption of debentures : from the proceeds of fresh issue of share-capital and debentures ; out of accumulated profit, including sinking fund ; out of current resources.

Methods of redemption of debentures : (*a*) In lump-sum at the end of stipulated period ; (*b*) By draw of lots ; (*c*) By purchasing in the open market; (*d*) By conversion into new debentures or shares.

Unit 3 : Final Accounts of Companies (*5 marks*)

Balance sheet in the prescribed form with major headings only (Schedule VI, part one only).

ACCOUNTING IV

ANALYSIS OF FINANCIAL STATEMENTS

Unit 4 : Analysis of Financial Statements (*6 marks*)

Meaning. Significance and Purpose. Limitations.

Unit 5 : Ratio Analysis (*15 marks*)

Meaning of ratio analysis. Meaning, objectives and compution of :

(*a*) Liquidity ratios : current ratio, quick ratio ;

(*b*) Solvency ratios : debt-equity ratio, interest coverage ratio, debt to total funds ratio ;

(*c*) Activity ratios : capital turnover ratio, fixed assets turnover ratio, net working capital turnover ratio, stock turnover ratio, debtors turnover ratio ;

(*d*) Profitability ratios : Gross profit ratio (GP), Net profit ratio (PR), Return on Investment (ROI), Return on equity (ROE).

Unit 6 : Statement of Changes in Financial Position (*20 marks*)

Meaning. Objective. Preparation of :

(*a*) Funds flow statement (net working capital basis) ;

(*b*) Cash flow statement (statement on cash basis)—adjustments to depreciation and amortization of intangible assets only.

Difference between the two types of statements.

Unit 7 : Comparison of Financial Statements (*5 marks*)

Meaning and purpose. Changes in absolute figures for not more than 3 years to be commented up (Intra-firm only).

Unit 8 : Cash Budget (*4 marks*)

Meaning of Budget. Cash Budget : (*a*) Concept ; (*b*) Utility ; (*c*) Preparation of simple cash budget with 10-15 variables and with no missing figure.

CONTENTS

ACCOUNTING III

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UNIT 1

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(*b*) Settlement of accounts : Preparation of realisation account and related accounts (excluding piecemeal distribution, sale to a company and insolvency of a partner).

1

Partnership Accounts : Fundamentals

NATURE OF PARTNERSHIP

A sole trader has certain limitations. He may not have the requisite capital, skill or experience to run a particular business. Even if he has all these, he may not have the initiative to undertake the risk involved in starting a new business. These limitations on the part of a sole trader drive him to enter into partnership with others. The partnership agreements in India are governed by the Indian Partnership Act, 1932.

DEFINITION OF PARTNERSHIP

According to Sec. 4 of the Indian Partnership Act, partnership is the relation between persons who have agreed to share the profits of a business carried on by all or any of them acting for all. If we analyse this definition, we shall find that a partnership firm has five essential characteristics. These are as follows :

1. *Association of two or more persons.* A partnership is an association of two or more persons. It ceases to be partnership if the number of partners gets reduced to one by any reason.

2. *Agreement.* A partnership is based on an agreement entered into between the persons concerned. The agreement may be express (*i.e.*, oral or written) or implied. Implied agreement may be inferred from the course of dealings or the conduct of the parties. The agreement may be for a fixed period, or for the execution of a particular adventure, or it may give option to the partners to withdraw from the partnership at any time.

3. *Business.* A partnership can be formed only for the purpose of carrying on of business. 'Business' includes every trade, occupation and profession. The word 'business' generally conveys the idea of a running business involving numerous transactions. Besides that a person may become a partner with another in a particular adventure or an undertaking. The business to be carried on by the firm must be legal.

4. *Sharing of profits.* The object of partnership must be to make profit. Profit means net profit, *i.e.*, excess of returns over outlays, the excess of what is obtained over the cost of obtaining it. Profit must be distributed among the partners in an agreed ratio. If any person claiming to be a partner is deprived of his right to share in the profits of the business, he is not a partner as his carrying on of business is not for profit. But the reverse is not necessarily true. A person may share in the profits of partnership, and still he may not be a partner. The sharing of profits also involves sharing of loss which in fact is negative profit. But as between the partners, it may be agreed that one or more of them shall not be liable for losses.

5. *Mutual agency.* The business of partnership may be carried on by all the partners or any of them acting for all. A partner is both an agent (in the sense that he can bind by his acts the other partners) and the principal (in the sense that he can be bound by the acts of the other partners).

PARTNERS, FIRM, FIRM NAME

Persons who have entered into partnership with one another are called individually 'partners' and collectively a 'firm' and the name under which the business is carried on is called the 'firm name'.

Maximum number of partners in a firm. There is a limit to the maximum number of partners in a firm. The number should not exceed ten in a firm carrying on banking business and twenty in a firm carrying on any other business. If the number exceeds this statutory limit, the firm must be registered as a company otherwise it becomes an illegal association.

Partnership and firm. Partnership is merely an abstract legal relation between the partners. It is, in other words, an abstract thing. A firm is a collective name for all the partners. It is a concrete thing. Partnership may be styled as the invisible tie binding the partners together. The firm is the visible body (collective group) of those partners who are thus bound together.

Legal status of firm. In mercantile or commercial usage, a firm is deemed to have existence distinct from the members constituting it. In some of the continental countries also a firm is recognised as a legal person distinct from the partners constituting it. But in England and India, from the legal point of view, a firm or partnership is not a distinct legal entity apart from the partners constituting it.

PARTNERSHIP DEED

It is an agreement in writing among the partners, setting out the terms and conditions on which the partnership is formed. It is in the interest of the partners that the agreement should be in writing. This avoids the likelihood of any dispute arising in future.

The usual provisions in a partnership deed are as follows :

1. Name of the firm and nature of the business.
2. Names and addresses of the partners.
3. The duration, if any, of partnership firm.
4. The total capital of the firm and the share of each partner.
5. The ratio of sharing profits and losses.
6. Whether capitals are to be fixed or fluctuating.
7. Whether any interest is to be allowed on partners' capitals, and if so, at what rate.
8. Rate of interest on advances.

9. Whether any interest is to be charged on drawings, and if so, at what rate.

10. The amount of salaries, or some allowance, if any, payable to the partners.

11. The amount which each partner can withdraw for his private expenses.

12. The provision relating to keeping of proper books of account.

13. The period after which the final accounts are to be prepared.

14. The audit of the accounts.

15. Admission of new partners and expulsion of the existing ones.

16. The method of ascertaining the share of goodwill of a partner on his retirement or death.

17. Whether decision in the case of Garner *vs*. Murray is to apply in the case of insolvency of a partner.

RULES APPLICABLE IN THE ABSENCE OF PARTNERSHIP DEED

In the absence of a Partnership Deed or agreement among the partners, or if the Partnership Deed is silent on a certain point, the rules as contained in Sections 12 to 17 of the Indian Partnership Act, 1932 apply. These rules are summed up as follows :

1. Every partner has a right to take part in the conduct of the business and is bound to attend diligently to his duties.

2. Differences arising as to ordinary matters connected with the business may be decided by a majority of the partners. If however change is to be made in the nature of the business, the consent of all the partners is necessary.

3. Every partner has a right to have access to and inspect and copy any of the books of the firm.

4. A partner is not entitled to receive remuneration for taking part in the conduct of the business.

5. The profits and losses shall be distributed equally among the partners.

6. Where a partner is entitled to interest on the capital subscribed by him, such interest shall be payable only out of profits.

7. A partner making an advance beyond his share of the amount of capital, for the purpose of the business, is entitled to interest thereon at the rate of six per cent per annum.

8. The firm shall make good the loss of, or compensate, a partner in respect of payments made and liabilities incurred by him in the conduct of the business of the firm.

9. A partner shall compensate the firm for any loss caused to it by the wilful neglect in the conduct of the business of the firm.

10. All the property of the firm including goodwill shall be held and used by the partners exclusively for the purposes of the business of the firm.

11. If a partner makes any secret profit out of the name of the firm or its property or business connections, or by carrying on any competing business, he shall account for it and pay it to the firm.

12. Where a change occurs in the constitution of a firm, the mutual rights and duties of the partners in the reconstituted firm shall remain the same as they were immediately before the change, as far as may be.

13. Where a firm constituted for a fixed term continues to carry on business after the expiry of that term, the mutual rights and duties of the partners shall remain the same as they were before the expiry of the term.

From the accounting point of view, the above provisions may be summarised as follows :

If there is no partnership agreement among the partners or if the partnership agreement is silent on any point—

1. The profit sharing ratio among the partners shall be equal.

2. No interest on capitals (even if the capitals are unequal) shall be allowed to the partners.

3. Interest on advance (the amount brought in by a partner in addition to his capital) shall be allowed at the rate of six per cent per annum.

4. No salary or extra remuneration shall be allowed to any partner.

KINDS OF PARTNERSHIP

A partnership may be :

1. **Partnership at will.** This is a partnership in which there is no agreement among the partners as to its duration. It may be run for any length of time depending on the will of the partners. It may be dissolved by any partner at any time by giving a notice in writing to all the other partners of his intention to dissolve the partnership.

2. **Partnership for a fixed period.** This is a parntership in which there is an agreement among the partners as to its duration. It automatically comes to an end after the expiry of that period. It may, however, be continued if the partners so desire. In such a case it becomes a partnership at will, but the rights and liabilities of the partners continue to be the same as before.

3. **Particular partnership.** This is a temporary partnership which is entered into for the execution of a particular job or for undertaking a particular adventure. This is known as the joint venture and is usually carried on without any firm name. After the completion of the job or adventure, it comes to an end.

RECORDING OF PARTNERSHIP TRANSACTIONS

The daily transactions of a partnership firm are recorded according to the principles of the double entry system, and in the same way as those of a

sole trader. However, the net profit as shown by Profit and Loss Account is transferred to another account called Profit and Loss Appropriation Account. This account shows how the profit made during a period together with the balance of the profit of the preceding year, if any, has been dealt with or disposed of.

NECESSARY ADJUSTMENTS IN ACCOUNTS

Before ascertaining the amount of profit which is divisible among the partners, the following adjustments are usually necessary in order to adjust the mutual rights of the partners :

1. Interest on Capital

If interest on capital is to be allowed, the Partnership Deed must contain a definite provision regarding the basis of the computation of interest. In the absence of any such provision, no interest on capital is to be allowed.

Where the partners share profits and losses in the ratio of their capitals, they finally get the same amount whether interest on capitals is provided or not. But even in that case, it is desirable to provide interest on capitals. This would enable the partners to know what profit do they make from the business over and above the interest they would have earned had they invested the capital in some other business or in some securities.

Provision of Interest on Capital becomes important in the following cases :

(*a*) Where the *capitals* of the partners are *equal* but the *profit sharing ratio* is *unequal*, it is in the interest of the partner whose profit sharing ratio is less that interest on capital should be provided.

Example :

	A	*B*
Capital	Rs. 5,000	Rs. 5,000
Profit sharing ratio	1/3	2/3

Profit for the year before charging interest on capital is Rs. 6,000.

Case (*i*) *When interest on capital is not provided :*

A would get 1/3rd of Rs. 6,000, *i.e.*,	Rs. 2,000
B would get 2/3rds of Rs. 6,000, *i.e.*,	Rs. 4,000
	Rs. 6,000

Case (*ii*) *When interest on capital (say at 12 per cent per annum) is provided :*

	as interest		as profit		
A would get	Rs. 600	+	Rs. 1,600	=	Rs. 2,200
B would get	Rs. 600	+	Rs. 3,200	=	Rs. 3,800
	Rs. 1,200	+	Rs. 4,800	=	Rs. 6,000

In case (*ii*), a portion of the profit (*i.e.*, Rs. 1,200) gets distributed in the capital ratio, and this benefits A.

(*b*) Where the *profit sharing ratio is equal*, but the *capitals* of the partners are *unequal*, it is in the interest of the partner whose capital is

larger that interest on capital should be provided. This tends to lessen inequality.

Example :

	A	B
Capital	Rs. 5,000	Rs. 10,000
Profit sharing ratio	1/2	1/2

Profit for the year before charging interest on capital is Rs. 6,000.

Case (i) When interest on capital is not provided :

A would get half of Rs. 6,000, *i.e.,*	Rs. 3,000
B would get half of Rs. 6,000, *i.e.,*	Rs. 3,000
	Rs. 6,000

Case (ii) When interest on capital (say at 12 per cent per annum) is provided :

	as interest		*as profit*		
A would get	Rs. 600	+	Rs. 2,100	=	Rs. 2,700
B would get	Rs. 1200	+	Rs. 2,100	=	Rs. 3,300
	Rs. 1,800	+	Rs. 4,200	=	Rs. 6,000

It would thus be clear that the object of allowing interest on capital is to divide a part of the profit in the capial ratio. The other objects of allowing interest on capital are as follows :

(*a*) To know the profit earning capacity of a business in the modern competitive conditions, it is but reasonable that interest on capital at a fair rate should be provided.

(*b*) To enable the partners to ascertain the profit they make from the business over and above the interest on capital, interest on capital must be provided.

The Journal Entry in books of account for Interest on Capital is as follows :

Interest on Capital or Current A/cs Dr.

To Partners' Capital or Current A/cs

(Being interest provided on the Capital of partners at a fixed rate)

Interest on Capital Account is closed by transfer to the debit of Profit and Loss Appropriation Account.

Calculation of Interest on Capital. This depends on the mutual agreement among the partners. The interest on capital may be agreed to be calculated :

(1) On the opening balance of Capital Accounts.

(2) On the closing balance of Capital Accounts.

(3) On the average capital balance.

(4) On each credit and debit in the capital from the date thereof to the end of the period.

The last two methods produce the same result and are obviously more equitable. If, however, there is no specific provision in the Partnership Deed regarding the basis of computation of interest on capital, interest is usually calculated on the opening balance of Capital Accounts.

2. Interest on Drawings

If interest on capital is allowed to the partners, it is fair that interest on drawings should be charged. The rate at which interest should be charged is laid down in the Partnership Deed.

The Journal Entry in the Books for interest on Drawings is as follows :

Partners' Capital or Drawings A/cs Dr.

To Interest on Drawings A/c

(Being interest charged at a fixed rate on the drawings of the partners)

Interest on Drawings Account is closed by transfer to the credit of Profit and Loss Appropriation Account.

Calculation of Interest on Drawings. As regards calculation of interest on drawings, the average due date method or the monthly or daily product method may be adopted.

Illustration 1. A, a partner in a firm, withdraws Rs. 500 *at the end of each month.* Calculate interest on his drawings for the year ending 31st December, 1989, the rate of interest being 10% per annum.

Solution :

Date on which amount is withdrawn	Amount Rs.	No. of months to 31st Dec. 1989	Monthly Product Rs.
31st January, 1989	500	11	5,500
28th February, ,,	500	10	5,000
31st March, ,,	500	9	4,500
30th April, ,,	500	8	4,000
31st May, ,,	500	7	3,500
30th June, ,,	500	6	3,000
31st July, ,,	500	5	2,500
31st August, ,,	500	4	2,000
30th September, ,,	500	3	1,500
31st October, ,,	500	2	1,000
30th November ,,	500	1	500
31st December, ,,	500	0	0
	Rs. 6000		33,000

$$\text{Interest} = \frac{33,000 \times 1 \times 10}{12 \times 100} = \text{Rs. } 275$$

If the amounts are withdrawn on *odd* dates, daily products may be calculated.

If the dates of drawings are not given, interest is calculated on [illegible] amount withdrawn during a certain period on the *average basis, i.e.*, for half the period. In the above Illustration, for example, if the dates of withdrawals

are not given we shall calculate interest on Rs. 6,000 (*i.e.*, the total amount withdrawn during the period of one year) for *six* months (*i.e.*, half of one year). Interest in such a case will work out to be :

$$\text{Interest} = \frac{6{,}000 \times 6 \times 10}{12 \times 100} = \text{Rs. } 300$$

3. Partners' Salary or Commission

To recognise the relative value of a partner's services, or where a partner does more work than the other partners, he is usually allowed a salary or commission. There should be a specific provision in this regard in the Partnership Deed. Salary to a partner like interest on capital is charged to Profit and Loss Appropriation Account and the net profit left is divided among the partners in the agreed ratio. If, at the end of the accounting period, a partner's salary remains unpaid, provision shall have to be made for it by passing an adjusting entry. The adjusting entry is :

Partner's Salary or Commission A/c Dr.

To Partner's Capital or Current A/c

(Being provision for salary or commission)

4. Interest on Loans or Advances by Partners

Where a partner advances a loan to the firm (or occasionally brings in some amount in addition to his capital), it should be credited to a separate Partner's Loan Account. Interest on that loan is allowed at the agreed rate, or in the absence of an agreement at six per cent per annum. The adjusting entry for this is :

Interest on Partner's Loan A/c Dr.

To Partner's Loan A/c

(Being provision for interest on Partner's Loan)

PROFIT AND LOSS APPROPRIATION ACCOUNT — DIVISION OF PROFITS

In a sole trader's business, the balance of the Profit and Loss Account (*i.e.*, Net Profit or Loss) is transferred direct to the trader's capital account. In partnerships, however, the net profit is transferred to an account called Profit and Loss Appropriation Account. This Account is a continuation of the Profit and Loss Account and is prepared to show the appropriation or disposal of profit or loss after the adjustment of the rights of the partners among themselves. It is credited with the net profit (or debited with the net loss) to begin with. Then it is debited with interest on partners' capitals and their salaries. It is credited with interest on drawings. The balance, which is the net profit or net loss after adjustment of the mutual rights of the partners, is transferred to the Capital Accounts of the partners in the profit sharing ratio.

Illustration 2. A and B are partners in a firm sharing profits and [illegible] 1st April, 1988, their capitals were Rs. 10,000 and Rs. 5,000 respectively. Interest on capital is to be allowed at 15% p.a. from

profits prior to division thereof. The net profit for the year ending 31st March, 1989 before allowing interest on capital amounted to Rs. 4,750.

Give the journal entries and prepare Profit and Loss Appropriation Account as on 31st March, 1989, showing the division of profit between A and B.

Solution :

JOURNAL

1989			Rs.	Rs.
Mar. 31	Profit and Loss Appropriation A/c Dr.		2,250	
	To A's Capital A/c			1,500
	To B's Capital A/c			750
	(Being interest on Capitals of A and B @ 15% p.a.)			
	Profit and Loss Appropriation A/c Dr.		2,500	
	To A's Capital A/c			1,250
	To B's Capital A/c			1,250
	(Being transfer of balance of profit)			

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Interest on Capitals :		Mar. 31	By Net Profit from Profit & Loss A/c	4,750
	A 1,500				
	B 750	2,250			
	To Capital A/cs :				
	A $\left(\frac{1}{2}\right)$	1,250			
	B $\left(\frac{1}{2}\right)$	1,250			
		4,750			4,750

Illustration 3. X and Y are carrying on crockery business in partnership sharing profits and losses as to 3/4ths to A and 1/4th to B. Their capitals on 1st April, 1988, amounted to Rs. 6,000 and Rs. 4,000 respectively. During the year ended 31st March, 1989, they lost Rs. 3,536 without taking into account interest on capital and drawings. According to Partnership Deed interest on capital is to be allowed at 15% p.a. and charged on drawings at 10% p.a. The drawings of X and Y during the year were Rs. 1,000 and Rs. 800 respectively and interest on them worked out to be Rs. 20 and Rs. 16 respectively.

Draw up the Profit and Loss Appropriation Account and the Capital Accounts of the Partners as on 31st March, 1989.

Solution :

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

		Rs.			Rs.
1989 Mar. 31	To Net Loss from Profit & Loss A/c	3,536	1989 Mar. 31	By Interest on Drawings : Rs. X 20, Y 16	36
	To Interest on Capitals : Rs. X 900, Y 600	1,500		By Capital A/cs :	
				X $\left(\frac{3}{4}\right)$	3,750
				Y $\left(\frac{1}{4}\right)$	1,250
		5,036			5,036

Dr. X's CAPITAL ACCOUNT Cr.

		Rs.			Rs.
1989 Mar. 31	To Drawings	1,000	1988 April 1	By Balance b/d	6,000
	To Interest on Drawings	20	1989 Mar. 31	By Interest on Capital	900
	To Profit & Loss App. A/c	3,750			
	To Balance c/d	2,130			
		6,900			6,900
			1989 Apr. 1	By Balance b/d	2,130

Dr. Y's CAPITAL ACCOUNT Cr.

		Rs.			Rs.
1989 Mar. 31	To Drawings	800	1988 April 1	By Balance b/d	4,000
	To Interest on Drawings	16	1989 Mar. 31	By Interest on Capital	600
	To Profit & Loss App. A/c	1,250			
	To Balance c/d	2,534			
		4,600			4,600
			1989 Apr. 1	By Balance b/d	2,534

Illustration 4. A and B joined in partnership on 1st April, 1988, without any formal deed between them. The capital introduced by them was : A Rs. 60,000, B Rs. 40,000. On 1st October, B advanced Rs. 10,000 to the firm as loan without any agreement as to interest. The net profit for the year ended 31st March, 1989 amounted to Rs. 8,300. The partners cannot agree on the following points :

(*a*) Interest on Loan. (*b*) Division of profit. (*c*) Interest on Capital.

Prepare accounts on the lines you would adopt, giving reasons for your action.

Solution :

In the absence of an agreement among partners—

(*a*) interest on loan will be allowed to B at 6% per annum ; (*b*) profits and losses shall be distributed equally among the partners ; and (*c*) interest on capital shall not be allowed.

In the light of the above provisions, the solution will be as follows :

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Interest on B's Laon (at 6% p.a. for six months)	300	Mar. 31	By Net Profit from Profit & Loss A/c	8,300
	To Capital A/cs :				
	A $\left(\frac{1}{2}\right)$	4,000			
	B $\left(\frac{1}{2}\right)$	4,000			
		8,300			8,300

Dr. A's CAPITAL ACCOUNT Cr.

1989		Rs.	1988		Rs.
Mar. 31	To Balance c/d	64,000	April 1	By Cash	60,000
			1989 Mar. 31	By Profit & Loss App. A/c	4,000
		64,000			64,000
			1989 April 1	By Balance b/d	64,000

Dr. B's CAPITAL ACCOUNT Cr.

1989		Rs.	1988		Rs.
Mar. 31	To Balance c/d	44,000	April 1	By Cash	40,000
			1989 Mar. 31	By Profit & Loss App. A/c	4,000
		44,000			44,000
			1989 April 1	By Balance b/d	44,000

Dr. B's LOAN ACCOUNT Cr.

1989		Rs.	1988		Rs.
Mar. 31	To Balance c/d	10,300	Oct. 1	By Cash	10,000
			1989 Mar. 31	By Interest	300
		10,300			10,300
			1989 April 1	By Balance b/d	10,300

FIXED AND FLUCTUATING CAPITALS

The capital of the partners, as agreed upon, may be fixed or fluctuating.

1. **Fixed Capitals.** In case it is agreed among the partners that the capital of each partner should be a fixed amount, the Capital Account of each partner would show the *same balance* year after year. All adjusments relating to (*i*) the amounts withdrawn by a partner and the interest chargeable thereon, (*ii*) interest on capital, (*iii*) share of profit or loss, (*iv*) partnership salary, if any, (*v*) interest on advances, if any, (*vi*) goods taken by the partner for personal use, are shown in a separate account, called *Current Account*. The balance of the Current Account of a partner is shown separately in the Balance Sheet. It appears on the liabilities side if its shows a credit balance, and on the assets side if it shows a debit balance.

One obvious advantage of maintaining two separate accounts of each partner, *i.e.*, Capital Account and Current Account, is to keep the Capital Account free from cumbersome details.

2. **Fluctuating Capitals.** In case only Capital Account of each partner is opened (and no Current Account also), all adjustments relating to drawings, interest on capital and drawings, profit or loss, and salary, are shown in the Capital Account itself. The capital in such a case is known as *fluctuating capital.* This is because the balance as shown by the Capital Account will fluctuate from period to period. The balance as shown by the Capital Account is shown in the Balance Sheet.

Illustration 5. A and B start partnership on 1st April, 1988 contributing Rs. 10,000 and Rs. 4,000 as their respective capitals. The Partnership Deed provides that :

(*a*) interest on capital is to be allowed at 15% per annum ;

(*b*) interest on drawings is to be charged on the total drawings at an average rate of 8%, irrespective of the date on which the amount is withdrawn ;

(*c*) B is to be entitled to a salary of Rs. 500 per month out of profits ;

(*d*) the divisible profits are to be shared between the partners in the ratio of 3/4ths to A and 1/4th to B.

The profit for the year ended 31st March, 1989 before providing for the above adjustments, amounted to Rs. 10,012. The drawings by the two partners during the year amounted to Rs. 2,800 and Rs. 3,300 respectively.

Prepare Profit and Loss Appropriation Account for the year ended 31st March, 1989. Also show the Partners' Capital Accounts as they would appear in the Ledger —

(*i*) if the capitals are fluctuating, and

(*ii*) if the capitals are fixed.

Prepare Partners' Capital Accounts in columnar form.

Solution :

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

1989				1989			
April 1	To Interest on Capitals :		Rs.	April 1	By Profit from Profit & Loss A/c		10,012
		Rs.			By Interest on Drawings :	Rs.	
	A	1,500			A	224	
	B	600	2,100		B	264	488
	To Salary to B		6,000				
	To Balance :	Rs.					
	A $\left(\frac{3}{4}\right)$	1,800					
	B $\left(\frac{1}{4}\right)$	600	2,400				
			10,500				10,500

(*i*) **If capitals are fluctuating**

Dr. CAPITAL ACCOUNTS Cr.

		A	B			A	B
1989		Rs.	Rs.	1988		Rs.	Rs.
Mar. 31	To Drawings	2,800	3,300	April 1	By Bank	10,000	4,000
	To Interest on Drawings	224	264	1989 Mar. 31	By Interest on Capital	1,500	600
	To Balance c/d	10,276	7,636		By Salary		6,000
					By Profit & Loss App. A/c–Share of Profit	1,800	600
		13,300	11,200			13,300	11,200
				1989 Apr. 1	By Balance b/d	10,276	7,636

(*ii*) **If capitals are fixed**

Dr CAPITAL ACCOUNTS Cr.

		A	B			A	B
1989		Rs.	Rs.	1988		Rs.	Rs.
Mar. 31	To Balance c/d	10,000	4,000	Apr. 1	By Bank	10,000	4,000
				1989 Apr. 1	By Balance b/d	10,000	4,000

Dr. CURRENT ACCOUNTS Cr.

		A	B			A	B
1989		Rs.	Rs.	1989		Rs.	Rs.
Mar. 31	To Drawings	2,800	3,300	Mar. 31	By Interest on Capital	1,500	600
	To Interest on Drawings	224	264		By Salary to B		6,000
	To Balance c/d	276	3,636		By Profit & Loss App. A/c–Share of Profit	1,800	600
		3,300	7,200			3,300	7,200
				1989 Apr. 1	By Balance b/d	276	3,636

Illustration 6. A, B and C are partners sharing profits and losses in the proportion of 1/2 : 1/3 : 1/6 respectively after taking into account the following matters :

(*i*) B and C are to be allowed a salary of Rs. 5,000 and Rs. 4,000 each p.a. respectively.

(*ii*) Interest at 18% p.a. on their respective fixed capitals, which are A Rs. 40,000, B Rs. 30,000 and C Rs. 20,000, is to be allowed.

(*iii*) Interest on opening balance of current accounts is to be allowed or charged, as the case may be, at 15% p.a.

During the year 1989, A has drawn Rs. 5,000 and B and C in addition to their salaries, have drawn Rs. 2,000 and Rs. 1000 respectively. The Profit and Loss Account for the year ended 31st December, 1989, showed a net profit of Rs. 55,650 before taking into account the above adjustments. On 1st January, 1989 the balances in the Current Accounts of the partners were A (Cr.) Rs. 4,000, B (Dr.) Rs. 2,000 and C (Cr.) Rs. 1,000.

Show the partner's Capital and Current Accounts as at 31st December, 1989 after division of profit in accordance with the partnership agreement. Also show Profit and Loss Appropriation Account.

Solution :

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

1989			Rs.	1989		Rs.
Dec. 31	To Salary :	Rs.		Dec. 31	By Profit b/d	55,650
	B	5,000			By Interest on Current A/c :	
	C	4,000	9,000		B	300
	To Interest on Capitals :					
	A	7,200				
	B	5,400				
	C	3,600	16,200			
	To Interest on Current A/cs :					
	A	600				
	C	150	750			

Contd.

Contd.

		Rs.			Rs.
	To Profit to Current A/cs : A 15,000 B 10,000 C 5,000	30,000	..		
		55,950			55,950

Dr. CAPITAL ACCOUNTS Cr.

		A	B	C			A	B	C
1989		Rs.	Rs.	Rs.	1989		Rs.	Rs.	Rs.
Dec. 31	To Bal. c/d	40,000	30,000	20,000	Jan. 1	By Bal. b/d	40,000	30,000	20,000
					1990				
					Jan. 1	By Bal.b/d	40,000	30,000	20,000

Dr. CURRENT ACCOUNTS Cr.

		A	B	C			A	B	C
1989		Rs.	Rs.	Rs.	1989		Rs.	Rs.	Rs.
Jan. 1	To Bal. b/d		2,000		Jan. 1	To Bal. b/d	4,000		1,000
Dec. 31	To Drawings	5,000	7,000	5,000	Dec.31	By Salary		5,000	4,000
	To Interest on Current A/c		300			By Interest on Current A/cs	600		150
	To Bal. c/d	21,800	11,100	6,950		To Interest on Capital	7,200	5,400	1,800
						By Profit & Loss App. A/c—share of profit	15,000	10,000	5,000
		26,800	20,400	11,950			26,800	20,400	11,950
					1990				
					Jan. 1	By Bal b/d	21,800	11,100	6,950

Illustration 7. A, B and C are partners sharing profits and losses in proportion to their capitals at the beginning of the year. They are entitled annually to draw Rs. 6,000, Rs. 5,000 and Rs. 4,000 respectively out of their anticipated shares of profits. Any drawings in excess of these amounts are to be regarded as advances taken from the firm and are to be subject to interest at the rate of 18% p.a. The capitals as at the beginning of the year are to be allowed interest at the rate of 15% p.a.

The capitals of the partners as at the beginning of the year were : A Rs. 80,000; B Rs. 60,000 and C Rs. 40,000. The credit balances of their current accounts were : A Rs. 2,304 ; B Rs. 3,728 ; and C Rs. 1,152. Their drawings during the year were : A Rs. 14,000; B Rs. 19,000; and C Rs. 6,000. The profit for the year was Rs. 60,840 before making any adjustment for interest as above.

Draw up Profit and Loss Appropriation Account, Capital and Current Accounts of partners.

Solution :

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

	Rs.		Rs.
To Interest on Capital :		By Net Profit from Profit	
A on Rs. 80,000	12,000	& Loss A/c	60,840
B on Rs. 60,000	9,000	By Interest on Drawings* :	
C on Rs. 40,000	6,000	A on Rs. 8,000	
To Net Profit transferred		(Rs. 14,000—Rs.6,000)	720
to Capital A/cs :		B on Rs. 14,000	
A—4/9	16,000	(Rs. 19,000—Rs. 5,000)	1,260
B—1/3	12,000	C on Rs. 2,000	
C—2/9	8,000	(Rs. 6,000—Rs.4,000)	180
	63,000		63,000

Dr. CAPITAL ACCOUNTS Cr.

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Balance c/d	80,000	60,000	40,000	By Balance b/d	80,000	60,000	40,000
	80,000	60,000	40,000		80,000	60,000	40,000
				By Balance b/d	80,000	60,000	40,000

Dr. CURRENT ACCOUNTS Cr.

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Drawings	14,000	19,000	6,000	By Balance b/d	2,304	3,728	1,152
To Interest on Drawings	720	1,260	180	By Int. on Capitals	12,000	9,000	6,000
To Balance c/d	10,584	4,468	8,972	By P & L App. A/c (4 : 3 : 2)	16,000	12,000	8,000
	30,304	24,728	15,152		30,304	24,728	15,152
				By Balance b/d	10,584	4,468	8,972

* Interest on drawings has been calculated @ 9% p.a. (average rate) on the excess amounts withdrawn by A, B and C. A has withdrawn Rs. 8,000 (Rs. 14,000–Rs. 6,000) more than he was entitled to withdraw and as such interest on this excess amount has been calculated. Likewise in case of B and C, interest has been calculated on the excess amounts withdrawn by them.

ADJUSTMENT OF CLOSED PARTNERSHIP ACCOUNTS

Sometimes interest on capitals or drawings or partners' salary is omitted by mistake at the time when the firm's final accounts are prepared. When this omission is discovered it is necessary to correct it. At the same time the consequent change in the amount of the profit divided among the partners has also to be made. This is done by passing the rectifying entries.

The procedure is as follows :

1. Calculate the opening capital of each partner from the adjusted capital as at the end of the year. This is done by adding to the adjusted capital whatever had been deducted therefrom earlier (*e.g.*, drawings) and deducting from it whatever had been added thereto earlier (*e.g.*, net profit).

2. Calculate interest on the opening capitals. Credit the capital accounts of the partners with respective amount of interest and debit Profit and Loss Appropriation Account.

3. Debit the Capital Accounts of the partners with interest on drawings and credit Profit and Loss Appropriation Account.

4. Debit the Capital Accounts of the partners in profit sharing ratio with the difference in the amounts of the entries passed in (2) and (3) above and credit Profit and Loss Appropriation Account.

The following Illustration will clarify the entries explained above :

Illustration 8. A, B and C are partners sharing profits and losses as to A one-half, B one-third, and C one-sixth. On 31st March, 1989, their Capital Accounts, after including the profit for the year ended 31st March 1989 and dealing with drawings, stood at Rs. 26,000, Rs. 20,000 and Rs. 11,500 respectively.

Subsequently they found out that interest on capital at 15% per annum and interest on drawings at the same rate had been omitted. The profit for the year in arriving at the above figures of capitals amounted to Rs. 18,000. The drawings of A, B and C during the year had been Rs. 3,000, Rs. 1,000 and Rs. 1,500 respectively. The interest on drawings works out to be Rs. 210 for A, Rs. 120 for B and Rs. 120 for C.

Give the necessary entries for rectifying the above omissions. Also prepare Profit and Loss Appropriation Account and the revised Capital Accounts of A and B.

Solution :

First of all, we shall have to ascertain the amount of each partner's capital at the beginning of the year. This is done in the following manner :

Partner's Capitals

	A	B	C
	Rs.	Rs.	Rs.
Balances on 31.3.1989	26,000	20,000	11,500
Add Drawings	3,000	1,000	1,500
	29,000	21,000	13,000
Deduct Profit	9,000	6,000	3,000
Balances on 1.4.1988	20,000	15,000	10,000

After this, the following rectifying entries will be passed :

JOURNAL

Date	Particulars		L.F.	Rs.	Rs.
1989 March. 31	Profit and Loss Appropriation A/c	Dr.		6,750	
	To A's Capital A/c				3,000
	To B's Capital A/c				2,250
	To C's Capital A/c				1,500
	(Being interest on capitals @ 15% omitted to be credited earlier, now credited)				
	A's Capital A/c	Dr.		210	
	B's Capital A/c	Dr.		120	
	C's Capital A/c	Dr.		120	
	To Profit and Loss Appropriation A/c				450
	(Being interst on drawings omitted to be charged earlier, now charged)				
	A's Capital A/c	Dr.		3,150	
	B's Capital A/c	Dr.		2,100	
	C's Capital A/c	Dr.		1,050	
	To Profit and Loss Apropriation A/c				6,300
	(Being adjustment of Profit and Loss for the year ending 31st March, 1989)				

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Interest on Capitals (not debited earlier) :		Mar. 31	By Interest on Drawings (not credited earlier) :	
	A 3,000			Rs.	
	B 2,250			A 210	
	C 1,500	6,750		B 120	
				C 120	450
				By Capital A/cs :	
				A 3,150	
				B 2,100	
				C 1,050	6,300
		6,750			6,750

Dr. A's CAPITAL ACCOUNT Cr.

1989		Rs.	1988		Rs.
Mar. 31	To Interest on Drawings	210	April 1	By Balance b/d	26,000
	To Profit & Loss Appropriation A/c	3,150		By Interest on Capital	3,000
	To Balance c/d	25,640			
		29,000			29,000
			1989 April 1	By Balance b/d	25,640

On the same lines, prepare the Capital Accounts of B and C.

Note : Instead of passing the three rectifying entries in the above Illustration, the following entry may be passed with the net effect :

A's Capital A/c	Dr. 360	
To B's Capital A/c		30
To C's Capital A/c		330
(Being adjustment in respect of interest on capitals and drawings which was omitted).		

In continuation of the above problem there may be some other cases which may necessitate adjustments in partnerships accounts. Some of these cases may be as follows :

1. Interest on capital and drawings may have either been wrongly calculated or calculated at wrong rates.
2. The profit sharing ratio may have been changed from some previous date. This may be the case when, for example, the Manager of the firm is made a partner from some back date.
3. The assets of the firm may have been revalued from some previous date and it may have resulted in profit or loss to the firm.

Under the above circumstances we may be required to pass necessary adjusting or rectifying entries. The procedure for passing these entries is as follows :

1. First of all find out the effect on the capital of the partners of what has actually been done.
2. Then find out the effect on the capital of the partners of what ought to have been done.
3. Find out the difference between the amounts of the entries passed in first two steps and then pass the necessary adjusting or rectifying entries in the books of account.

Illustration 9. A, B and C are partners sharing profits and losses in the ratio of 3 : 2 : 1 respectively. On 1st April, 1988 their Capital Accounts stood at Rs. 20,000, Rs. 15,000 and Rs. 10,000 respectively. Their drawings during the year were Rs. 3,000, Rs. 1,000 and Rs. 1,500 respectively. The profit divided among the partners for the year ended 31st March, 1989 was Rs. 23,299. However, it was discovered later that interest on Capital was allowed and interest on Drawings on average basis was charged at 12% p.a. instead of 18% p.a. Depreciation provision on assets amounting Rs. 1,810 has not been taken into account.

Calculate the net profit for the year before adjustments and prepare the Profit and Loss Appropriation Account and the Current Accounts of the partners.

Solution :

First of all we find out the net profit before adjustments :

			Rs.
Net Profit transferred to Capital Accounts of partners			23,299
Add Interest on Capital at 12% p.a :			
	A	2,400	
	B	1,800	
	C	1,200	5,400
			28,699

Less Interest on Drawings at 12% p.a. :
(average rate of 6% p.a.) :

A	180	
B	60	
C	90	
		330
Net Profit before adjustments		28,369

Now this net profit will be distributed among the partners after making the necessary adjustment entries. For this purpose Profit and Loss Appropriation Account is to be prepared as shown below :

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

Particulars		Amount Rs.	Particulars		Amount Rs.
To Interest on Capital :			By Net Profit brought from P & L A/c		28,369
A	3,600		By Interest on Drawings :		
B	2,700		A	270	
C	1,800	8,100	B	90	
To Depreciation provision		1,810	C	135	495
To Capitals A/cs :					
A — 1/2		9,477			
B — 1/3		6,318			
C — 1/6		3,159			
		28,864			28,864

Dr. CURRENT ACCOUNTS OF PARTNERS Cr.

Particulars	A Rs.	B Rs.	C Rs.	Particulars	A Rs.	B Rs.	C Rs.
To Drawings	3,000	1,000	1,500	By Int. on Capital	3,600	2,700	1,800
To Int. on Drawings	270	90	135	By Net Profit	9,477	6,318	3,159
To Balance c/d	9,807	7,928	3,324				
	13,077	9,018	4,959		13,077	9,018	4,959

Where the excess amount to be paid to a partner who has been given a guarantee is to be borne by the remaining partners, it is better to prepare the Profit and Loss Appropriation Account in two parts. In the first part, we show the net profit on the credit side and the guaranteed amount (payable to the partner who has been given a guarantee) on the debit side. The balance shown by the first part is taken to the credit side of the second part of the Profit and Loss Appropriation Account. This Account is further credited with the excess amounts guaranteed by the remaining partners, their Capital Accounts being debited in the agreed ratio. The entry for this is as follows :

X's Capital A/c	Dr.	(with the share of excess to
Y's Capital A/c	Dr.	be borne by each of them)
To Profit and Loss Appropriation A/c		

The balance now shown by the Profit and Loss Appropriation Account is transferred to the Capital Accounts of X and Y in their old profit sharing ratio.

Illustration 12. A, B and C are partners in a firm sharing profits and losses in the ratio of 5 : 4 : 1 with the condition that C will get a guaranteed minimum of Rs. 12,000 and A and B will bear any excess over 1/10th going to C in the ratio of 4 : 1 respectively. The profit of the firm in respect of the year are Rs. 1,00,000. Prepare Profit and Loss Appropriation Account.

Solution :

C's share of profit comes to Rs. 10,000, being 1/10th of Rs. 100,000. But he has been guaranteed a minimum amount of Rs. 12,000. The excess Rs. 2,000 to be paid to C will be borne by A and B in the ratio of 4 : 1, *i.e.*, A will bear Rs. 1,600 and B Rs. 400.

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

		Rs.		Rs.
To C's Capital A/c	Rs.		By Net Profit brought	
(1/10 of 1,00,000	10,000		from P & L A/c	1,00,000
Balance Rs. 2,000 payable by A and B:				
A $\frac{4}{5}$ of Rs. 2,000	1,600			
B $\frac{1}{5}$ of Rs. 2,000	400	12,000		
To Balance Profit to :				
A				
$\frac{5}{9}$ of Rs. 90,000	50,000			
Less given over to C	1,600	48,400		
B				
$\frac{4}{9}$ of 90,000	40,000			
Less given over to C	400	39,600		
		1,00,000		1,00,000

The Illustration can also be worked out in the following manner :

Dr. PROFIT AND LOSS APPROPRIATION ACCOUNT Cr.

	Rs.		Rs.
To C's Capital A/c (guaranteed amount)	12,000	By Net Profit brought from P & L A/c	1,00,000
To Balance c/d	88,000		
	1,00,000		1,00,000
To Balance to :		By Balance b/d	88,000
A's Capital A/c (5/9 of 90,000)	50,000	By A's Capital A/c (4/5th of 2,000 payable to C)	1,600
B's Capital A/c (4/9 of 90,000)	40,000	By B's Capital A/c (1/5th of 2,000 payable to C)	400
	90,000		90,000

Thus A gets Rs. 50,000 – Rs. 1,600, *i.e.*,	Rs.	48,400
B gets Rs. 40,000 – Rs. 400, *i.e.*,	Rs.	39,600
C gets Rs. 10,000 + Rs. 2,000, *i.e.*,	Rs.	12,000
Total	Rs.	1,00,000

TEST QUESTIONS

1. Define partnership. What are its essential characteristics ?

2. What do you understand by a 'firm' and a 'firm name' ?

3. Distinguish between a partnership and a joint venture.

4. Explain clearly the meaning of 'Fixed Capital Accounts' and 'Fluctuating Capital Accounts'. *(Delhi SSCE, 1986)*

5. Distinguish between Fixed Capitals and a Fluctuating Capitals. *(Delhi SSCE, 1981, 85, 87, 89)*

6. Distinguish between fixed and fluctuating capitals of partners. In which case are Partners' Current Accounts necessary ? *(Dehli SSCE, 1988)*

7. Name the methods of calculating interest on drawings of the partners. *(All India SSCE, 1983)*

8. What is Profit and Loss Appropriation Account ? Why is it prepared ?

9. What is a Partnership Deed ? What clauses are usually found in it ?

10. State at least five important points from Accountancy point of view which must be incorporated in a Partnership Deed. *(All India SSCE, 1985)*

11. State the main provisions of the Indian Partnership Act, 1932 relating to partnership accounts if there is no partnership agreement. *(All India SSCE, 1983)*

12. How are the relations between partners determined in the absence of a Partnership Deed ?

13. In the absence of a Partnership Deed what are the rules relating to :

(*a*) Salaries of Partners ;

(*b*) Interest on Partners' capitals ;

(*c*) Interest on Partners' loans ;

(*d*) Profit and loss ratio ; and

(*e*) Interest on Partners' drawings. *(All India SSCE, 1988)*

14. A and B are in partnership. They do not have any partnership agreement. What should be done in respect of the following ?

(*a*) A spends twice as much time as B on partnership business and claims he should get a salary of Rs. 5,000 per annum.

(*b*) B has provided capital of Rs. 15,000 whereas A has only provided Rs. 5,000 of capital. A has, however, made a loan of Rs. 10,000 to the business. What interest, if any, will be credited to A and B ?

(*c*) B wants that the profit should be distributed in the ratio of capitals whereas A wants that it should be distributed equally. Who of the two is right ?

(*d*) A wants to introduce his son into the business. B objects to this.

15. A and B enter into partnership as window cleaners. At the end of the year B says that he has worked twice as many hours as A and should

therefore get two-thirds of the profit. A on the other hand points out that he provided the cleaning machine, worth Rs. 5,000, and should therefore be entitled to interest on his Capital. There is no partnership agreement and you are asked to advise the partners, and say who is right.

16. A firm of A and B has no Partnership Deed. Can the following claims be legally made :

(*i*) B claims interest of 12% p.a. on his loan which he has advanced to the firm.

(*ii*) B claims that he has invested much larger capital than A and hence he should be allowed interest at 8% per annum.

(*iii*) A claims salary of Rs. 500 per month as he is the only active partner, B being the sleeping partner.

PRACTICAL EXERCISES—I

1. A and B are partners with capitals of Rs. 20,000 and Rs. 30,000 respectively in a firm. Their gross trading profit is Rs. 3,250. By their partnership agreement, they divide profits in proportion to their capitals after giving B Rs. 500 per month as salary and allowing 15% interest on capital. A's drawing were Rs. 7,000 and B's Rs. 10,000.

Draw up a Profit and Loss Account and partners' Capital Accounts.

(*Ans*. Division of Profit : A Rs. 3,900 ; B Rs. 5,800 , Capitals : A Rs. 19,900 ; B Rs. 36,350).

2. A and B enter into partnership on 1st April, 1988 without any partnership agreement. They introduce capitals of Rs. 5,000 and Rs. 3,000 respectively. On 1st October 1988, A advances Rs. 2,000 by way of loan to the firm without any agreement as to interest.

The Profit and Loss Account for the year ended 31st March 1989 discloses a profit of Rs. 4,300 but the partners cannot agree upon the question of interest or upon the basis of division of profit.

You are required to divide the profit between them, giving reasons for your method.

(*Ans*. Division of Profit : A Rs. 2,120 ; B Rs. 2,120).

3. Anant and Hari are in partnership sharing profits and losses in the ratio of 3/5ths and 2/5ths respectively. From the following details prepare the Capital and Current Accounts of both the partners :

	Anant Rs.	Hari Rs.
Capital Account balances as on 1st April, 1988	4,500	3,000
Additional capital brought in on 1st October, 1988	500	
Current Account balances as on 1st April, 1988	170 (Cr.)	90 (Dr.)
Cash Drawings	600	400
Drawings in goods	90	80
Salaries	100	200

The firm's net profit for the year ended 31st March, 1989, *before* charging the salaries, was Rs. 1,100. On which side of the Balance Sheet of the firm would the balance of Hari's Current Account appear ?

(*Ans*. Current Accounts : Anant (Cr.) Rs. 60 ; Hari (Dr.) Rs. 50. Hari's Current Account will appear on the assets side of the Balance Sheet).

4. X, Y, Z, are in partnership, and on April 1, 1988 their respective capitals were Rs. 40,000, Rs. 27,800, Rs. 15,900. Y is entitled to a salary of Rs. 2,500 and Z to Rs. 2,000 per annum, payable before division of profits. X is entitled to 40% of the first Rs. 10,000, Y to 35% and Z to 25% ; over that amount profits are shared equally. The profit for the year ended March 31, 1989 after debiting partners' salaries but before charging interest on capital at 15% per annum was Rs. 23,170, and the partners had drawn Rs. 8,000 each on account of salaries, interest and profits. Prepare the closing entries of the Profit and Loss Account and the Partner's Capital and Current Accounts for the year.

[*Ans.* Capital Accounts : X Rs. 40,000, Y Rs. 27,800, Z Rs. 15,900. Current Accounts : X Rs. 2,205 (Cr.), Y Rs. 2,375 (Cr.), Z Rs. 910 (Dr.)].

5. A, B and C are in partnership, their respective capitals being Rs. 80,000, Rs. 50,000 and Rs. 30,000. Profits and losses are shared in proportion to capital, interest at 15% p.a. is allowed on capital but no interest is charged on drawings ; B receives a salary of Rs. 5,000 p.a. and C of Rs. 3,000 p.a. The balance of profit before charging partners' salaries or interest was Rs. 48,000 ; this was after debiting an exceptional bad debt of Rs. 30,000, which it had mutually been agreed by all the partners should be borne as to three-fourths by A and one-eighth each by B and C. The total drawings of the partners were A Rs. 15,000, B Rs. 16,000 and C Rs. 9,000.

Prepare the Profit and Loss Appropriation Account and the partner's Current Accounts.

[*Ans.* Current Accounts : A (Cr.) Rs. 2,500; B (Cr.) Rs. 7,125; C (Cr.) Rs. 3,375].

6. Ajay and Vijay are partners with capitals of Rs. 60,000 and Rs. 20,000 respectively on 1st April, 1988. The trading profit (before taking into account the provisions of the Deed) for the year ended 31st March, 1989 was Rs. 24,000. Interest on capitals is to be allowed at 16 per cent per annum. Ajay is entitled to a salary of Rs. 6,000 per annum. The drawings of Ajay and Vijay were Rs. 6,000 and Rs: 4,000 respectively ; the interest thereon for Ajay being Rs. 200 and for Vijay Rs. 100. Show how the profit will be divided among Ajay and Vijay by preparing Profit and Loss Appropriation Account and also show the Capital Accounts assuming the

(*Adapted from All India SSCE, 1986*)

(*b*) The Profit and Loss [illegible]
showed a profit of Rs. 15,000,
made under the partnership agre
Rs. 6,000 respectively during tl

Show the partners' Capital
to directions stated above.

(*Ans.* Capital Accounts :
30th September, 1988—C (C
31st March, 1989—C (Cr.) R

2. On 1st April 1988, three
credit of their Capital Accounts ;
On the same day they had to the c
B Rs. 500 and C Rs. 400. Profits
Capital upto Rs. 2,000. Above that
A, B and C drew during the year

8. Jyoti and Ashish are partners in a firm sharing profits and losses in the ratio of 3 : 2. The balances standing to the credit of their capital accounts as on 1st April, 1988 were :

Jyoti	...	Rs. 1,00,000
Ashish	...	Rs. 80,000

The terms of the partnership deed provide for the following :

(*i*) That the partners will be paid interest on their capital at 15% per annum.

(*ii*) Both the partners to get a monthly salary of Rs. 2,000 each.

The profit of the firm for the year ending 31st March, 1989, before making the above appropriations and charging interest on drawings, was Rs. 2,00,000.

The drawings of Jyoti and Ashish were Rs. 30,000 and Rs. 40,000 respectively. The firm decided to charge interest on drawings from the partners at an average rate of 10% per annum.

Prepare Profit and Loss Appropriation Account and partners' Capital Accounts if capitals are (*i*) fixed, (*ii*) fluctuating.

(*Adapted from All India SSCE 1989*)

[*Ans.* (*i*) Capitals : Jyoti Rs. 1,00,000, Ashish Rs. 80,000. Current Accounts : Jyoti Rs. 85,200, Ashish Rs. 64,800.

(*ii*) Capitals : Jyoti Rs. 1,85,200, Ashish Rs. 1,24,800].

9. On 1st April, 1988, A and B entered into partnership contributing Rs. 60,000 and Rs. 45,000 respectively. They agreed to share profits and losses in the ratio of 3 : 2. B is allowed a salary of Rs. 12,000 per annum. Interest on capital is to be allowed at 10% per annum. During the year A withdrew Rs. 9,000 and B Rs. 18,000 as drawings. The interest on drawings by A and B was Rs. 150 and 210 respectively. Profit as at 31st March 1989 before the above mentioned adjustments was Rs. 35,000.

Show the distribution of profits by preparing Profit and Loss Appropriation Account of the firm. Prepare Partners' Capital Accounts also.

(*Delhi SSCE, 1982*)

(*Ans.* Profit : A Rs. 7,716 ; B Rs. 5,144. Capital Accounts : A Rs. 64,566 ; B Rs. 48,434).

10. A and B are partners with capitals of Rs. 30,000 and Rs. 10,000 respectively on 1st April, 1988. The trad[illegible] ners':

account nts : Ajay
Rs. 12,0
entitled ril, 1988.
were Rsms of the
Rs. 150
AssKaku and
Approprely. (*iii*)
fluctuati
(*A*he above
Rs. 32,s. 40,000
112,000 for
of 3 :
fixed n Capital
1989 v
E, 1986)
: Kaku

	Anant		Hari	
	Rs.		Rs.	
	4,500		3,000	
	500			
	170	(Cr.)	90	(Dr.)
	600		400	
	90		80	
	100		200	

ded 31st March, 1989, *before*
nich side of the Balance Sheet of
Account appear ?
) Rs. 60 ; Hari (Dr.) Rs. 50. Hari's
side of the Balance Sheet).

Show the Profit and Loss Appropriation Account indicating the amount finally due to each partner.

(*Ans.* Profit : A Rs. 1,00,800; B Rs. 67,200; C Rs. 48,000).

12. A and B are partners in a firm sharing profits and losses in the ratio of 2 : 1. Their Balance Sheet on 31st March, 1989 stood as follows :

BALANCE SHEET as on 31st March, 1989

Liabilities	Rs.	*Assets*		Rs.
A's Capital	20,000	Drawings :		
		A	6,000	
B's Capital	15,000	*B*	4,000	10,000
		Other Assets		25,000
	35,000			35,000

Profit for the year ended 31st March, 1989 is Rs. 9,000. It is divided between the partners in the agreed ratio, but interest on capital at 15% and on drawings at 18% is inadvertently ignored.

Pass the necessary adjusting entries. Interest on drawings is to be calculated on an average basis for 6 months.

(*Ans.* Debit A and credit B with Rs. 440).

PRACTICAL EXERCISES—II

1. C and D were trading in partnership on April 1, 1988 under the firm name of C and D. C's Capital Account then showed a credit balance of Rs. 35,000 and D's Capital Account showed a credit balance of Rs. 10,000. Each partner was entitled to interest at 16% per annum on the balance of his capital account as stated at the beginning of each half-year. D was entitled to a salary of Rs. 2,000 per annum, and the balance of profits was to be shared equally between the partners.

(*a*) For the half-year ended September 30, 1988 the firm's Profit and Loss Account before taking into account any of the provisions set forth above, showed a loss of Rs. 5,050. C and D withdrew Rs. 5,350 and Rs. 4,600 respectively on September 30; apart from this no withdrawals took place.

Show the Partners' Capital Accounts for the half-year ended September 30, giving effect to the above provisions.

(*b*) The Profit and Loss Account for the half-year ended March 31, 1989 showed a profit of Rs. 15,000, before allowing for any of provisions to be made under the partnership agreement. C and D had withdrawn Rs. 8,500 and Rs. 6,000 respectively during this period.

Show the partners' Capital Accounts for this half-year also giving effect to directions stated above.

(*Ans.* Capital Accounts :

30th September, 1988—C (Cr.) Rs. 27,625 ; D (Cr.) Rs. 2,375.

31st March, 1989—C (Cr.) Rs. 27,135; D (Dr.) Rs. 3,365).

2. On 1st April 1988, three partners had the following amounts to the credit of their Capital Accounts ; A Rs. 5,000, B Rs. 3,000 and C Rs. 2,000. On the same day they had to the credit of their Current Accounts : A Rs. 750, B Rs. 500 and C Rs. 400. Profits are divided in the same proportion as the Capital upto Rs. 2,000. Above that amount, A gets 25%, B 35% and C 40%. A, B and C drew during the year ending 31st March, 1989 Rs. 500, Rs. 400

and Rs. 300 respectively. The profit for the year amounted to Rs. 4,200 before charging interst on Capital (to which all are entitled) at 16%.

Give the Current Account of each partner on 31st March 1989. Interst on drawings is to be ignored.

(*Ans.* Current Accounts : A Rs. 2,200 ; B Rs. 1,390 ; C Rs. 1,060).

3. J and R have been carrying on business in partnership during the year ending March 31, 1989. No partnership deed was, however, executed. Capital was introduced into the business as follows : J Rs. 5,000, R Rs. 1,000. J, in addition, advanced Rs. 1,000 on 1st October, 1989 to the firm as a loan. There was no agreement as to the payment of interest upon this loan. The profit for the year ended March 31, 1989 amounted to Rs. 3,750 prior to provision for interest, if any, either upon Capital or Loan Accounts. 20% of this profit is to be transferred to Reserve Account. The partners cannot agree, either as to the proportion in which the profits are to be divided, or upon the question of interest. They refer the matter to you, and agree to abide by the accounts prepared by you.

How would you divide the profit for the year ?

(*Ans.* Share of Profit : J Rs. 1,485 ; R Rs. 1,485).

4. On 1st April, 1988 Rajiv and Rajni commenced business as partners with an initial capital of Rs. 40,000 and Rs. 60,000 in their respective accounts. The partnership deed provides, *inter alia,* that—

1. Profits and losses shall be shared in the ratio of 2 : 3 as between Rajiv and Rajni.
2. Partners shall be entitled to interest on capital at the commencement of each year at 15% p.a.
3. Interest on drawings shall be charged at 18% p.a.
4. Rajiv shall get a salary of Rs. 1,500 per mensem.

During the year ended 31st March, 1989, the firm made a profit of Rs. 51,380 before adjustment of interest on capital and drawings. The partners withdrew during the year Rs. 3,000 each at the end of every quarter commencing from 30th June, 1988.

Prepare Profit and Loss Appropriation Account and the Capital Accounts of Rajiv and Rajni.

(*Ans.* Capitals : Rajiv Rs. 59,190; Rajni 68,190).

5. A, B and C, sharing profits and losses equally, have capital of A Rs. 25,000, B Rs. 12,000, C Rs. 8,000. At the end of the year, interest on capital was credited to them at 18% instead of 15%.

Correct the error by means of a journal entry.

(*Ans.* Debit A with Rs. 300. Credit B and C with Rs. 90 and Rs. 210 respectively).

6. A, B and C were in partnership and their capitals were Rs. 8,000, Rs. 4,000 and Rs. 3,000 respectively at 1st April, 1988. It was agreed in the partnership agreement—

(*i*) that interest is to be allowed on capitals at 15 per cent per annum, but is not to be charged on drawings ;

(*ii*) that C should be credited with a salary of Rs. 900 per annum ;

(*iii*) that profits are to be shared in proportion to capitals ;

(*iv*) that capital accounts are to remain constant.

It was later agreed to alter clause (*iii*) to read profits to be shared between A, B and C as 3 : 2 : 2, and to alter clause (*ii*) to allow C Rs. 1,000 per annum. Both these new clauses were to operate from 1st October, in the same year.

Before any appropriations were made under the agreement, the net profit for the year was Rs. 9,625. It was ascertained that the profit for the first half-year was Rs. 4,500.

Drawings were : A Rs. 300 per month, B Rs. 150 per month, C Rs. 150 per month each for the first half-year ; thereafter Rs. 200 per month for all.

You are required to prepare the Appropriation Account and the partners' Current Accounts for the year.

(*Ans*. Current Accounts :

30th September, 1988—A (Cr.) Rs. 360, B (Cr.) Rs. 180; C (Cr.) Rs. 360.

31st March, 1989—A (Cr.) Rs. 1,260 : B (Cr.) Rs. 400; C (Cr.) Rs. 885).

7. After including the profits for the year ended 31st March, 1989, and dealing with drawings, the Capital Accounts of A, B and C stood at Rs. 16,000, Rs. 12,000 and Rs. 8,000 respectively.

Subsequently they discovered that interest on capital at 15 per cent and interest on drawings had been omitted, the latter sums being A Rs. 225 ; B Rs. 150 and C Rs. 90. The profit for the year in arriving at the above figures of capitals amounted to Rs. 18,000 and the partners' drawings had been : A Rs. 3,000 ; B Rs. 2,250 ; and C Rs. 1,350. They shared profits and losses as to A one-half ; B one-third ; and C one-sixth.

Give the necessary entries rectifying the omissions.

(*Ans*. Net effect : A loses 337·50, B gains Rs. 12·50, C gains Rs. 325).

8. After including the profits for the year ended March 31 and dealing with drawings, the capital accounts of A, B and C stood at Rs. 40,000, Rs. 30,000, and Rs. 20,000 respectively. Subsequenlty, the following omissions were noticed and it was decided to bring them into account : (*a*) Interest on capital at 15% per annum. (*b*) Interest on drawings, A Rs. 750, B Rs. 270 and C Rs. 390.

The profits for the year in arriving at the above figures of capitals amounted to Rs. 60,000 and their drawings had been A Rs. 10,000, B Rs. 7,500, C Rs. 4,500. They shared profits and losses as to A one-half, B one-third, and C one-sixth.

Give the adjusted Capital Accounts of the partners with the entries necessary for such adjustments.

(*Ans*. Capitals : A Rs. 39,055 ; B Rs. 30,225 ; C Rs. 20,720).

9. Mohan, Vijay and Anil are partners, the balances on their capital accounts being Rs. 30,000, Rs. 25,000 and Rs. 20,000 respectively. In arriving at these figures, the profits for the year ended March, 31, 1989 Rs. 24,000 had already been credited to partners in the proportion in which they shared profits. Their drawings were Rs. 5,000 (Mohan), Rs. 3,000 (Vijay) and Rs. 3,000 (Anil) in the year. Subsequently the following omissions were noticed and it was decided to bring them into account :

(*i*) Interest on capital at 15% per annum.

(*ii*) Interest on drawings (Mohan Rs. 500, Vijay Rs. 400 and Anil Rs. 300).

Make the necessary corrections through Profit and Loss Appropriation Account and through a Journal Entry. Partners share profits and losses in the ratio of 2 : 2 : 1 *(Adapted from Delhi SSCE, 1983)*

(*Ans*. Credit Mohan and Vijay with Rs. 110 and Rs. 460 respectively and Debit Ajay with Rs. 570).

10. Pankhuri, Smriti and Ayushi start a Boutique in partnership with capitals of Rs. 1,00,000, Rs. 50,000 and Rs. 20,000 respectively. After providing interest on capital at 16% per annum, the profits are agreed to be divided in the ratio of 3 : 2 : 1. Pankhuri and Smriti guarantee that Ayushi's share of profit in any year shall not be less than Rs. 5,000.

During the year ending 31st March, 1989, Pankhuri and Smriti have withdrawn Rs. 10,000 each and Ayushi Rs. 5,000. Interest on Drawings works out to : Pankhuri Rs. 500, Smriti Rs. 400 and Ayushi Rs. 300.

During the first year, net profit before providing or charging interest is Rs. 50,000.

You are required to prepare Profit and Loss Appropriation Account and Capital Accounts of the partners.

(*Ans*. Profit : Pankhuri Rs. 11,400 ; Smriti Rs. 7,600 ; Ayushi Rs. 5,000. Capitals : Pankhuri Rs. 1,16,900 ; Smriti Rs. 55,200; Ayushi Rs. 22,900).

11. Three chartered accountants X, Y, Z form a partnership, profits being divisible in the ratio of 3 : 2 : 1, subject to the following :

(*i*) Z's share of profit is guaranteed to be not less than Rs. 15,000 per annum ;

(*ii*) Y gives guarantee to the effect that the gross fees earned by him for the firm shall be equal to his average gross fees of the preceding five years when he was carrying on profession alone (which average works out at Rs. 25,000). The profit for the first year of the partnership is Rs. 75,000. The gross fees earned by Y for the firm are Rs. 16,000.

You are required to show the distribution of profits.

(*Ans*. Division of Profit : X Rs. 41,400 ; Y Rs. 18,600 ; Z Rs. 15,000).

12. X, having a capital of Rs. 60,000, takes Y and Z into partnership on April 1, 1988 on the following terms :

Y to bring in Rs. 20,000 as capital ; interest on his capital to be allowed at 15%; *Y* to further receive a salary of Rs. 6,000 annually.

Z is guaranteed by *X* that his minimum share of profits shall be Rs. 6,000 per annum ; and profits are to be shared as to *X* one-half, *Y* one-third and Z one-sixth.

In the first year of partnership the business shows a profit of Rs. 6,000 before charging Y's salary or interest on capital. They had drawn during the year *X* Rs. 10,000, Y Rs. 8,000 (including salary), Z Rs. 6,000.

Show the position of partners' accounts on March 31, 1989 after adjustments. No interest on drawings is to be allowed.

What did each partner gain or lose for the year ?

[*Ans*. Capitals : X Rs. 42,000 ; Y Rs. 20,000. X loses Rs. 8,000 and Y and Z gain Rs. 8,000 (including interest and salary) and Rs. 6,000 respectively].

2

Partnership Accounts—Change in Constitution of Firm— Admission of a Partner

We have observed in the previous chapter that the day-to-day transactions of a partnership firm are recorded in the same manner as those of a sale trader. The firm has a complete set of subsidiary books and ledger. After the subsidiary books are posted to ledger, a trial balance is prepared periodically to check the accuracy of posting. At the end of the accounting period, adjusting entries are passed. The last stage is the closing of ledger and the preparation of final accounts.

Special treatment is however required in partnership accounts in the following cases :

1. Admission of a new partner.
2. Retirement of a partner.
3. Death of partner.
4. Sale of partnership business to one of the partners.
5. Amalgamation of two or more firms.
6. Dissolution of firm.
7. Conversion of firm into a limited company.

In this Chapter, we shall be discussing the first case. The other cases are discussed in the following Chapters :

ADMISSION OF A PARTNER

A person may be admitted as a new partner, either—

(1) with the consent of all the existing partners, or

(2) in accordance with a contract already entered into between the partners for the admission of a new partner.

On the admission of a new partner, the following points usually arise:

1. Calculation of new profit sharing ratio.
2. Treatment of goodwill.
3. Adjustment in the values of assets and liabilities.
4. Transfer to the old partners' capital accounts of

    (*i*) Reserve fund, if any, and

    (*ii*) Balance of profit or loss, if any, appearing in the Balance Sheet.

5. Adjustment of the capitals of the old partners on the basis of the capital of the new partner, or calculation of the capital of the incoming partner on the basis of the capitals of the old partners.

These points are discussed below :

1. NEW PROFIT SHARING RATIO

The calculation of the new profit sharing ratio depends upon the agreement between the old partners and the new partner.

When a new partner is given a share of profit (say 1/4th), the old partners, unless otherwise agreed, will share the remaining profit (*i.e.*, 3/4ths share) in the old ratio.

The following illustration explains the calculation of the new profit sharing ratio :

Illustration 1. A and B are partners sharing profits and losses in the proportion of 2 : 1. They admit a new partner C whom they give 1/6th share in profits.

Calculate the new profit sharing ratio.

Solution :

C's share	= 1/6
Remaining share	= 1–1/6=5/6
A's new share	= 2/3 of 5/6= 5/9
B's new share	= 1/3 of 5/6= 5/18.

The new profit sharing ratio between A, B and C = 5/9 : 5/18 : 1/3 or 10 : 5 : 3.

Sometimes, it is given in a question that the incoming partner (say C) purchases or acquires his share of profit from the old partners (say A and B) in a certain ratio. In such a case, the share of the old partners is calculated in the following manner :

A's new share of profit= Old share–share surrendered to C.

B's new share of profit= Old share–share surrendered to C.

The share of the incoming partner will be calculated as follows :

C's share of profit=Share surrendered by A + share surrendered by B.

The following illustrations will make the point clear :

Illustration 2. A and B are partners sharing profits and losses in the proportion of 7 : 5. They agree to admit C, their manager, into partnership who is to get 1/6th share in the profits. He acquires this share as 1/24th from A and 1/8th from B.

Calculate the new profit sharing ratio.

Solution:

A surrenders $\frac{1}{24}$ th share of his profit to C

His new share will be $\frac{7}{12}-\frac{1}{24}=\frac{13}{24}$

B surrenders $\frac{1}{8}$ th share of profit to C

His new share will be $\frac{5}{12}-\frac{1}{8}=\frac{7}{24}$

C' share of profit = $\frac{1}{24}+\frac{1}{8}=\frac{1}{6}$.

The new profit sharing ratio between A, B and C will be :

$\frac{13}{24}:\frac{7}{24}:\frac{1}{6}$ or 13 : 7 : 4.

Illustration 3. A and B are partners in a firm sharing profits and losses in the ratio of 3 : 2. A new partner C is admitted. A surrenders 1/5th share of his profit in favour of C and B 2/5th of his share in favour of C. Calculate the new profit sharing ratio.

Solution :

A surrenders in favour of C = $\frac{1}{5}$ of $\frac{3}{5}$, *i.e.*, $\frac{3}{25}$ th share

A's new share = $\frac{3}{5}-\frac{3}{25}=\frac{15-3}{25}=\frac{12}{25}$

B surrenders in favour of C= $\frac{2}{5}$ of $\frac{2}{5}$, *i.e.*, $\frac{4}{25}$ th share

B's new share = $\frac{2}{5}-\frac{4}{25}=\frac{10-4}{25}=\frac{6}{25}$

C's share = $\frac{3}{25}+\frac{4}{25}=\frac{7}{25}$

The new profit sharing ratio will be :

$\frac{12}{25}:\frac{6}{25}:\frac{7}{25}$ or 12 : 6 : 7.

Illustration 4. A and B are partners sharing profits and losses as 60 Paise to A and 40 Paise to B in a rupee. They admit C as a new partner who is to get a share of 20 Paise.

Calculate the new profit sharing ratio in each of the following cases :

(1) If C acquires his share from A and B in their profit sharing ratio.

(2) If he acquires 12 Paise from A and 8 Paise from B.

(3) If he acquires 10 Paise from A and 10 Paise from B.

(4) If he acquires 5 Paise from A and 15 Paise from B.

(5) If he acquires his share entirely from A.

(6) If he acquires his share entirely from B.

Solution :

The new profit sharing ratio in each of the above cases will be as follows :

(1) C's share of profit is 20 Paise in a rupee. He acquires it in the ratio of 3/5 and 2/5 (60 : 40, *i.e.*, 3 : 2) from A and B. This means he acquires 12 Paise share from A and 8 Paise share from B. The new profit sharing ratio will be :

A's share = 60 Paise–12 Paise= 48 Paise.

B's share = 40 Paise– 8 Paise= 32 Paise.

C's share = 20 Paise.

or A : B : C = 48 : 32 : 20 or 12 : 8 : 5.

(2) This case is same as case (1).

(3) A's share of profit in the new firm = 60 Paise–10 Paise = 50 Paise.

B's share of profit in the new firm = 40 Paise–10 Paise = 30 Paise.

C's share = 20 Paise.

or A : B : C = 50 : 30 : 20 or 5 : 3 : 2.

(4) A's new share = 60 Paise–5 Paise = 55 Paise.

B's new share = 40 Paise–15 Paise =25 Paise.

C's share = 20 Paise.

or A : B : C = 55 : 25 : 20 or 11 : 5 : 4.

(5) A's new share = 60 Paise–20 Paise= 40 Paise.

B's new share = 40 Paise (It remains unaffected).

C's share = 20 Paise.

or A : B : C = 40 : 40 : 20 or 2 : 2 : 1.

(6) A : B : C = 60 : 20 : 20 or 3 : 1 : 1.

2. GOODWILL

A business establishes some reputation in course of time. Goodwill is the value of this reputation which the business builds up due to its efficient service to its customers, quality of its products, etc. This reputation enables the business to earn more than the normal profits earned by the other businesses. If a new partner is, therefore, admitted into a firm which enjoys some goodwill in the market, it is fair that he brings in some amount in addition to his capital. In that sense, goodwill may be defined as " a compensation paid by a newcomer in an established business to the existing proprietors thereof for their past efforts and the risk of the capital they underwent to bring the business to its present stage of reputation or profit earning capacity, and in return for their agreeing to forego a share of the future profit for his benefit."

Goodwill however attaches only to a business which has been making some super-profits (*i.e.*, profits more than ordinarily earned by the other businesses in the same line). An incoming partner therefore makes a payment, over and above the capital in the hope that the business would continue to earn super-profits.

The factors on which the value of goodwill depends are :

1. The location of the business premises.

2. The nature of the firm's products or the reputation of its service.
3. The possession of favourable contracts, complete or partial monopoly, etc.
4. The personal reputation of the partners.
5. The possession of contented and satisfied employees.
6. The possession of trade marks, patents or a well-known business name.
7. Continuance of advertising campaigns.
8. The maintenance of quality of the firm's products, and development of the business with changing conditions.
9. Freedom from legislative restrictions.

Goodwill is taken into account in partnership accounts :

1. Upon the introduction of a new partner.
2. Upon the retirement or death of a partner.
3. Upon an agreement between partners to change the proportions in which they share profits and losses.
4. At the time of amalgamation of two or more firms.
5. At the time of dissolution of the firm.
6. At the time of the sale of the business to a limited company.
7. At the time of the conversion of the firm into a limited company.

Valuation of Goodwill

Valuation of goodwill is not an easy thing. In many cases, purely arbitrary methods, depending on the custom of trade, are adopted. Usually the method of valuation of goodwill is given in the Partnership Deed.

The usual methods, however, are as follows :

(1) **Average Profits Method.** In this case, the average of the profits of the last few years is multiplied by an agreed number, say two, three, four or five, to arrive at the value of goodwill. If, for example, it is to be valued at twice the average profits of the last five years, it is said to be valued at two years' purchase of the last five years' average profits.

Illustration 5. The profits earned by a business over the last five years are Rs. 10,000, Rs. 12,000, Rs. 8,000, Rs. 7,000 and Rs. 13,000.

Find out the value of the goodwill of the business if it is based on 3 years' purchase of the last five years' average profits.

Solution:

Total profit for the last five years = Rs. 10,000 + Rs. 12,000 + Rs. 8,000 + Rs. 7,000 + Rs. 13,000 = Rs. 50,000.

Average profit = Rs. 50,000 ÷ 5 = Rs. 10,000

Value of goodwill = Rs. 10,000 × 3 = Rs. 30,000

(2) **Super-profits Method.** Super-profit means the profit earned by a firm over and above the normal profit earned by other firms in the same business. It is calculated by deducting from the profit in any year (*a*) interest on capital at market rate, and (*b*) reasonable salary of the proprietor or the partners. In this method of valuation of goodwill, the super-profit is multiplied by an agreed figure. This gives the value of goodwill.

Illustration 6. The average profits of a business over the last five years amount to Rs. 12,000. The normal commercial yield on capital invested in such a business is deemed to be 10% per annum. The net capital invested in the business is Rs. 1,00,000.

Find out the value of the goodwill of the business if it is based on three years' purchase of the average super-profits of the last five years.

Solution:

Average profit of the last 5 years	= Rs. 12,000
Normal profit (@ 10% on Rs. 1,00,000)	= Rs. 10,000
Super-profit	= Rs. 2,000

Value of goodwill = Rs. 2,000 × 3= Rs. 6,000.

Illustration 7. A partnership firm earned net profits during the last three years as follows :

Year	*Net Profit*
1986	Rs. 17,000
1987	Rs. 20,000
1988	Rs. 23,000

The capital investment in the firm throughout the above mentioned period has been Rs. 40,000. Having regard to the risk involved, 15% is considered to be a fair return on the capital. The remuneration of the partners during this period is estimated to be Rs. 10,000 per annum.

Calculate the value of goodwill on the basis of 2 years' purchase of average super profits earned during the above-mentioned three years.

(*Adapted from Delhi SSCE, 1987*)

Solution:

Average profit of three years =

$$\frac{17,000 + 20,000 + 23,000}{3} = \frac{60,000}{3} = \text{Rs. } 20,000$$

Less normal profit (@ 15% on Rs. 40,000)	= Rs. 6,000
	Rs. 14,000
Less partners' remuneration	= Rs. 10,000
Super-profit	= Rs. 4,000
Value of goodwill = Rs. 4,000 × 2	= Rs. 8,000

(3) **Capitalisation Method.** In this case, the capital invested by the partners in the business is assumed to earn normal or reasonable profit. If the firm is earning more than this normal profit, the excess capital which would have been needed to earn this extra profit is the value of goodwill.

Illustration 8. The capital of a firm is Rs. 50,000, and its profits for the last three years average to Rs. 7,500.

Assuming that 10 per cent is the reasonable rate of return in the business, find out the value of goodwill.

Solution:

To earn Rs. 10, the capital required is Rs. 100.

To earn Rs. 7,500 the capital required is $= \frac{100}{10} \times 7{,}500 =$ Rs. 75,000.

But the firm is earning the profit of Rs. 7,500 with a capital of Rs. 50,000 only. This difference of Rs. 25,000 (*i.e.*, Rs. 75,000 minus Rs. 50,000) is the value of goodwill.

The following formula may be used to find out the value of goodwill according to capitalisation method :

$$\text{Goodwill} = \left(\frac{\text{Average Profit} \times 100}{\text{Normal Rate of Profit}}\right) - \text{Capital}$$

Hidden Goodwill. In some questions, goodwill is hidden and it has to be calculated. The hidden goodwill is calculated with reference to the total capital of the firm. Take, for example, the following Balance Sheet of A and B who share profits equally, on 31st March, 1989 :

BALANCE SHEET OF A and B as on 31st March, 1989

	Rs.		Rs.
Capitals :		Assets	90,000
A	50,000		
B	40,000		
	90,000		90,000

They admit C as a partner and give him 1/4th share of profit. He brings in Rs. 40,000 as his share of Capital. If the student is a little alert, he will find that some goodwill is hidden in the question. It may be calculated as follows :

C brings in Rs. 40,000 as his capital for his 1/4th share of profits. On this basis, the total capital of the firm should be Rs. 1,60,000 (*i.e.*, 40,000 × 4/1). But in this case total capital of A, B and C comes to Rs. 50,000 + Rs. 40,000 + Rs. 40,000, *i.e.*, Rs. 1,30,000. In such a case, it can be safely inferred that the value of goodwill of the firm should be Rs. 30,000 (*i.e.*, Rs. 1,60,000 –Rs. 1,30,000).

Methods of dealing with Goodwill on the Admission of a Partner

These may be discussed under the following two headings :

(1) Where there is no goodwill account in the books of the firm at the time of admission

There are four methods of dealing with goodwill in this case :

(*a*) **Goodwill paid privately.** Goodwill may be paid by the incoming partner to the old partners outside the business. In such a case, there is no record of goodwill in the books the firm.

(*b*) **Goodwill brought in cash and retained in the business.** Goodwill may be brought by the incoming partner for his share in cash. It is then distributed among the old partners. The question now is : In which ratio is the goodwill to be distributed among the old partners ?

Ratio of sacrifice. When a new partner is admitted and given a share of profit, the old partners stand to lose. They surrender some share of profit to the new partner. The amount of Goodwill brought in by the new partner in cash for his share of profit is a compensation to the old partners for this loss of share of profit. It should, therefore, be distributed among the old partners in the *ratio of sacrifice, i.e.*, the ratio in which they lose their share of profits.

The following examples will clarify this point :

(1) A and B are partners sharing profits and losses in the ratio of 4 : 3. They admit a new partner C and agree to share the profit in the ratio of 3 : 3 : 1. Formerly A was getting 4/7th and B 3/7th share of profits whereas now A gets 3/7th and B gets 3/7th share of profits. By C's admission, B does not lose at all. He receives as much share of profit now as he was receiving earlier, *i.e.*, 3/7th share of profits. A, however, surrenders 4/7 minus 3/7, *i.e.*, 1/7th share of profit to C. Therefore, any amount brought in by C on account of goodwill should be credited to A.

(2) A and B are partners in a business, sharing profits and losses as 60 Paise to A and 40 Paise to B in a rupee. They admit C who is given a share of 20 Paise in the rupee. He brings in Rs. 2,000 as his share of goodwill. C may get his share of profit from A and B, say, in any one of the following ways :

(*i*) 12 Paise from A and 8 Paise from B (*i.e.*, in the ratio in which A and B are sharing profits).

(*ii*) 10 Paise from A and 10 Paise from B (*i.e.*, equally)

(*iii*) 5 Paise from A and 15 Paise from B.

(*iv*) Entirely from A.

(*v*) Entirely from B.

The amount of goodwill brought in by C in cash will be distributed between A and B in these cases as follows :

(*i*) In the ratio of 12 : 8, *i.e.*, 3 : 2. A will get Rs. 1,200 and B Rs. 800.

(*ii*) In the ratio of 10 : 10, *i.e.*, equally. A and B will get Rs. 1,000 each.

(*iii*) In the ratio of 5 : 15, *i.e.*, 1 : 3. A will get Rs. 500 and B Rs. 1,500.

(*iv*) The entire amount will go to A.

(*v*) The entire amount will go to B.

Thus it is concluded that the amount of goodwill brought in cash by the incoming partner is distributed among the old partners in the ratio in which they *lose* or *surrender* their share of profits. The entries in this case including the entry for the amount of capital brought in by the incoming partner are as follows :

When the incoming partner brings cash on account of capital and goodwill :

Cash A/c	Dr.
To Incoming Partner's Capital A/c	
(Being amount brought in by the incoming partner on account of his capital Rs..... and share of goodwill Rs.......)	

When goodwill is transferred to old partners' Capital Accounts (in the ratio of sacrifice) :

Incoming Partner's Capital A/c	Dr.
To Old Partners' Capital A/cs	
(Being transfer of goodwill amount to old partner's Capital Accounts in the ratio of their sacrifice)	

Illustration 9. A and B are in partnership sharing profits and losses equally. They admit a new partner C and the new profit sharing ratio is agreed to be 4 : 3 : 2.

In what ratio will goodwill be distributed between A and B if C brings in Rs. 4,000 as his share of goodwill ?

Solution:

The old profit sharing ratio between A and B is $\frac{1}{2} : \frac{1}{2}$.

The new profit sharing ratio among A, B and C is $\frac{4}{9} : \frac{3}{9} : \frac{2}{9}$.

A loses $\frac{1}{2} - \frac{4}{9} = \frac{9-8}{18} = \frac{1}{18}$, *i.e.*, $\frac{1}{18}$ th share of profit.

B loses $\frac{1}{2} - \frac{3}{9} = \frac{9-6}{18} = \frac{3}{18}$, *i.e.*, $\frac{3}{18}$ th share of profit.

The ratio in which A and B lose is $\frac{1}{18}$ and $\frac{3}{18}$ or 1 : 3. Goodwill will, therefore, be distributed between A and B in this ratio, *i.e.,* 1 : 3. A's share will be Rs. 1,000 and that of B will be Rs. 3,000.

Illustration 10. A and B are partners in a business sharing profits and losses in the ratio of 7 : 5. They admit C into partnership who is to get 1/6th share which he acquires 1/24th from A and 1/8th from B. He brings in Rs. 10,000 capital and Rs. 6,000 as 1/6th share of goodwill.

Pass the entries in the books of the firm.

Solution:

A loses 1/24th share of profit.

B loses 1/8th share of profit.

Goodwill will, therefore, be distributed in the ratio of $\frac{1}{24} : \frac{1}{8}$ or 1 : 3 or $\frac{1}{4} : \frac{3}{4}$.

JOURNAL

			Rs.	Rs.
	Cash A/c Dr.		16,000	
	To C's Capital A/c			16,000
	(Being amount brought in by C as his capital and share of goodwill)			
	C's Capital A/c Dr.		6,000	
	To A's Capital A/c			1,500
	To B's Capital A/c			4,500
	(Being transfer of goodwill to old partners in the ratio of sacrifice)			

(*c*) Goodwill brought in cash and withdrawn by the old partners. Goodwill may be brought in by the incoming partner in cash, along with capital, and it may be withdrawn by the old partners.

The Journal Entries in this case are as follows :

When the incoming partner brings cash on account of capital and goodwill

Cash A/c Dr.
To Incoming Partner's Capital A/c
(Being amount brought in by the incoming partner on account of his capital Rs.....and share of goodwill Rs......)

When goodwill is transferred to old partners' Capital Accounts (in the ratio of sacrifice)

Incoming Partner's Capital A/c Dr.
To Old Partners' Capital A/cs
(Being transfer of goodwill amount to old partners' Capital Accounts in the ratio of their sacrifice)

When the amount is withdrawn by the old partners :

Capital A/cs of Old Partners Dr.
To Cash A/c
(Being the withdrawal of amount on account of goodwill)

(*d*) **Goodwill raised in books of account.** If the new partner does not bring his share of goodwill in cash, goodwill is raised in books of account at its full value. This is done by debiting Goodwill Account and crediting Capital Accounts of the old partners in the old profit sharing ratio.

The Journal Entry in this case is as follows :

Goodwill A/c Dr.
To Old Partners' Capital A/cs
(Being the entry for raising goodwill in firm's books and crediting to old partners in their old profit sharing ratio)

It is important to note that *if goodwill is raised in books of account it is credited to the old partners in their old profit sharing ratio.* If Goodwill Account is allowed to stand in the books of the firm, no further entry would be passed. But as goodwill is an intangible asset, it is advisable that it should be wiped off or written off. This is done by debiting the Capital Accounts of all the partners (including the new partner in the new profit sharing ratio) and crediting Goodwill Account. The Journal Entry in such a case is as follows :

Capital A/cs of all Partners (including new partner) Dr.
To Goodwill A/c
(Being the entry for writing back goodwill to the Capital Accounts of all the partners in the *new profit sharing* ratio)

Illustration 11. A and B are in partnership sharing profits and losses in proportion to their capitals, *i.e.,* A Rs. 12,000 and B Rs. 8,000. They agree to admit C into partnership on 1st January, 1990, and give him 1/4th share of profits. C brings in Rs. 10,000 for capital but expresses his inability to bring his share of goodwill in cash. A and B decide to raise goodwill in the books at Rs. 5,000.

Pass the necessary entries on C's admission. What further entry would be passed if A, B and C decide that Goodwill Account should not appear in the books of the firm ?

Solution:

JOURNAL

			Rs.	Rs.
1990 Jan. 1	Goodwill A/c Dr.		5,000	
	To A's Capital A/c			3,000
	To B's Capital A/c			2,000
	(Being the entry for raising goodwill at the agreed valuation)			

			Rs.	Rs.
	Cash A/c Dr. To C's Capital A/c (Being amount brought in by C as his capital)		10,000	10,000
	A's Capital A/c Dr. B's Capital A/c Dr. C's Capital A/c Dr. To Goodwill A/c (Being amount of goodwill written back to the Capital A/cs of partners in the new profit sharing ratio)		2,250 1,500 1,250	5,000

Note :

Old profit sharing ratio of A and B = 12,000 : 8,000 or 3 : 2

Therefore, Rs. 5,000 has been credited to A and B in the ratio of 3 : 2.

C has been given 1/4th share of profit.

Remainder $= 1 - \frac{1}{4} = \frac{3}{4}$.

A's share $= \frac{3}{5} \text{ of } \frac{3}{4} = \frac{9}{20}$

B's share $= \frac{2}{5} \text{ of } \frac{3}{4} = \frac{6}{20}$

New profit sharing ratio $= \frac{9}{20} : \frac{6}{20} : \frac{1}{4}$

or A : B : C = 9 : 6 : 5.

To write off goodwill, Rs. 5,000 has been debited to A, B and C in the ratio of 9 : 6 : 5.

(2) Where goodwill account already exists in the books of the firm at the time of admission

Where goodwill appears in books of account, it means it has already been taken into account. It is, then, revalued on the admission of a new partner. The necessary adjustments consequent upon the revaluation of goodwill are as follows :

(*a*) If Goodwill Account appears in books of account at its full value, the incoming partner will not be required to pay anything on account of goodwill, and therefore, no adjusting entry is passed. If the new partner is asked to bring his share of Goodwill in cash, Goodwill Account already existing in the books of the firm is written off to the Capital Accounts of the old partners in the old profit sharing ratio. Then the amount of goodwill brought in cash by the new partner is distributed among the old partners in the ratio of sacrifice.

(*b*) If Goodwill Account appears at a value below the new valuation of goodwill, either of the following two methods may be adopted :

(*i*) Goodwill Account may be debited by the difference between the new value of goodwill and its old value, and credited to the Capital Accounts of the old partners in the old profit sharing ratio.

Illustration 12. Goodwill Account appears at Rs. 3,000 in the books of a firm constituted by partners A and B. They share profits and losses in the ratio of 2 : 1. The new valuation of goodwill on the admission of a new partner C is taken at Rs. 4,500. C brings in Rs. 5,000 as his capital for 1/4th share of profit which he acquires from A and B in their profit sharing ratio. He brings nothing on account of goodwill.

Pass the necessary journal entries on the admission of C as a partner.

Solution :

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			Rs.	Rs.
	Goodwill A/c Dr.		1,500	
	To A's Capital A/c			1,000
	To B's Capital A/c			500
	(Being accretion in the value of goodwill on C's admission)			
	Cash A/c Dr.		5,000	
	To C's Capital A/c			5,000
	(Being amount brought in by C on account to capital)			

(*ii*) The existing Goodwill Account may be eliminated by writing it off to the Capital Accounts of the old partners in the old profit sharing ratio, and the incoming partner may be asked to bring his share of goodwill in cash.

When, in the above Illustration, Goodwill is written off to the old partners' Capital Accounts, the following Journal Entry will be passed :

A's Capital A/c	Dr. Rs. 2,000	
B's Capital A/c	Dr. Rs. 1,000	
To Goodwill A/c		Rs. 3,000
(Being entry for writing off Goodwill A/c)		

Now it becomes a case of no Goodwill Account appearing in the books of account. After writing off Goodwill Account appearing in the books at old value, Goodwill Account will be raised in books at new value. That will be the case when the incoming partner does not bring his share of goodwill in cash. The entry for this will be as follows :

Goodwill A/c	Dr. 4,500	
A's Capital A/c		3,000
B's Capital A/c		1,500
(Being entry for goodwill at full value raised on the admission of new partner C)		

Illustration 13. A and B are partners in a business sharing profits and losses equally. On 31st December, 1989, they admit a new partner C whom they give 1/4th share of profit. C brings in Rs. 6,000 for his 1/4th share of goodwill and Rs. 10,000 as his capital. Goodwill Account already appears in the books of the firm at Rs. 20,000.

Pass the Journal entries on C's admission.

Solution :

JOURNAL

1989			Rs.	Rs.
Dec. 31	A's Capital A/c Dr.		10,000	
	B's Capital A/c Dr.		10,000	
	To Goodwill A/c			20,000
	(Being the entry for raising goodwill at the agreed valuation)			
	Cash A/c Dr.		16,000	
	To C's Capital A/c			16,000
	(Being amount brought in by C on account of capital and his share of goodwill)			
	C's Capital A/c Dr.		6,000	
	To A's Capital A/c			3,000
	To B's Capital A/c			3,000
	(Being transfer of goodwill to A and B on C's admission)			

(*c*) If Goodwill Account appears in books of account at a value higher than its new valuation, the excess should be written back to the Capital Accounts of the old partners in the old profit sharing ratio.

The Journal Entry in this case is as follows :

A's Capital A/c   Dr.
B's Capital A/c   Dr.
    To Goodwill A/c

(Being excess in the value of goodwill written off
    to the Capital A/cs of the old partners)

The goodwill will now appear in the Balance Sheet at the new valuation.

Illustration 14. A, B and C are partners in a business sharing profits and losses in the ratio of 4 : 3 : 2. They admit a new partner D who brings in Rs. 12,000 as capital for his 1/6th share of profit. He expresses his inability to bring goodwill in cash. Goodwill of the firm is to be valued at 2 years' purchase of the average of the last five years' profits. The profits for the last five years are Rs. 18,000, 12,000, 15,000, 17,000 and 28,000.

Pass the Journal Entries—

(*a*) if there is no Goodwill Account in the books of the firm.

(*b*) if Goodwill Account appears in the books of the firm at

(*i*) Rs. 27,000

(*ii*) Rs. 54,000

(*iii*) Rs. 36,000

Solution:

Total of last 5 years' profits=Rs. 18,000+ 12,000+15,000+ 17,000+ 28,000 = Rs.90,000.

Average= Rs. 90,000 ÷ 5= Rs. 18,000.

Present value of goodwill=Rs. 18,000 × 2= Rs. 36,000.

The journal entry for capital brought in by C will be.

JOURNAL

			Rs.	Rs.
	Cash A/c Dr. To D's Capital A/c (Being cash brought in by D as his Capital)		12,000	12,000

For goodwill, the entries will be as follows :

Case (*a*)

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			Rs.	Rs.
	Goodwill A/c Dr. To A's Capital A/c To B's Capital A/c To C's Capital A/c (Being entry for goodwill raised at Rs. 36,000 on C's admission and credited to the old partners in the ratio of 4 : 3 : 2)		36,000	16,000 12,000 8,000

Case (*b*) (*i*)

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			Rs.	Rs.
	Goodwill A/c Dr. To A's Capital A/c To B's Capital A/c To C's Capital A/c (Being entry for raising goodwill from Rs. 27,000 to Rs. 36,000 on C's admission and increase being credited to the old partners in the ratio of 4 : 3 : 2)		9,000	4,000 3,000 2,000

Case (*b*) (*ii*)

JOURNAL

			Rs.	Rs.
	A's Capital A/c Dr.		8,000	
	B's Capital A/c Dr.		6,000	
	C's Capital A/c Dr.		4,000	
	To Goodwill A/c			18,000
	(Being entry to record to fall in the value of goodwill from Rs. 54,000 to Rs. 36,000 the difference being debited to old partners in the ratio of 4 : 3 : 2)			

Case (*b*) (*iii*)—No entry.

3. REVALUATION OF ASSETS AND LIABILITIES

When a new partner is admitted, very often the assets and liabilities are revalued. This is done to take into account any rise or fall in their value. If, for example, the value of some assets has gone up, the old partners would insist on their revaluation as this would result in profit to them. But if some liabilities have not been taken into account or some assets have been overvalued, the incoming partner would insist on their revaluation. For this purpose a revaluation of the values of assets and liabilities is done. This revaluation may take either of the following two forms, *viz*,

(1) Where adjusted values of assets and liabilities are *to be shown* in books of account, or

(2) Where the adjusted values of assets and liabilities are *not to be shown* in books of account.

(1) Where adjusted values are to be shown in books of account

In this case a Profit and Loss Adjustment Account or Revaluation Account is prepared. This account is debited with fall in the value of assets, outstanding expenses and increase in liabilities. It is credited with rise in the value of assets and reduction in the value of liabilities, and prepaid expenses.

The Revaluation Account in a tabular form is given hereunder :

Dr. REVALUATION ACCOUNT Cr.

Dr.	Cr.
1. Fall in the value of assets.	1. Rise in the value of assets.
2. Outstanding expenses.	2. Unrecorded asset.
3. Increase in some liability.	3. Accrued incomes and gains and prepaid expenses.
4. Unrecorded liability.	4. Reduction in some liability.
5. Profit—difference	5. Loss—difference.

The resultant balance of this Account is either a profit or loss which is transferred to the Capital Accounts of the old partners in the *old profit sharing ratio.*

Journal Entries

(1) *If there is a fall in the value of an asset :*

Revaluation A/c Dr.
To Asset A/c

(2) *If there is a rise in the value in an asset :*

Asset A/c Dr.
To Revaluation A/c

(3) *If there is some unrecorded asset :*

Asset A/c Dr.
To Revaluation A/c

(4) *If there is some outstanding expense :*

Revaluation A/c Dr.
To Outstanding Expense A/c

(5) *If there is some accrued income or prepaid expense :*

Accrued Income/Prepaid Expense A/c Dr
To Revaluation A/c

(6) *If there is increase in some liability :*

Revaluation A/c Dr.
To Liability A/c

(7) *If there is reduction in some liability :*

Liability A/c Dr.
To Revaluation A/c

(8) *If there is some unrecorded liability :*

Revaluation A/c Dr.
To Liability A/c

(9) *If there is a profit :*

Revaluation A/c
To Capital A/cs of Old Partners
(in old profit sharing ratio)

(10) *If there is a loss :*

Capital A/cs of Old Partners Dr.
(in old profit sharing ratio)
To Revaluation A/c

Illustration 15. A and B, partners in a firm, admit C into partnership on 1st April, 1989. On the date of admission, their Balance Sheet was as follows :

BALANCE SHEET OF A and B as on Ist April, 1989

Liabilities		Rs.	*Assets*		Rs.
Creditors		18,000	Cash		817
Bank Overdraft		7,000	Bank		2,183
Capital :			Debtors	10,000	
A	60,000		*Less* Reserve	500	
B	60,000				9,500
		1,20,000	Stock		12,000
			Furniture		5,500
			Plant		45,000
			Building		70,000
		1,45,000			1,45,000

The following adjustments in values of assets and liabilities are to be carried through :

(*a*) Reserve for doubtful debts is to be raised to 7%.

(*b*) Value of Stock and Furniture is to be reduced by 5% and 10% respectively.

(*c*) Plant is to be depreciated by 20%.

(*d*) A plant for Rs. 10,000 purchased two years earlier had not been recorded in books of account. It is to be depreciated @ 20% per annum on the reducing instalment method.

(*e*) Insurance Premium unexpired is Rs. 350.

(*f*) Salaries and Rent amounting to Rs. 11,000 and Rs. 3,000 are outstanding for March, 1989.

(*g*) An unrecorded liability on 1st April, 1989 is Rs. 2,400.

(*h*) The value of Building is to be raised by Rs. 50,000.

Pass Journal Entries to record the above and prepare Revaluation Account.

Solution:

JOURNAL

			Rs.	Rs.
1989 April 1	Revaluation A/c Dr.		26,750	
	To Reserve for Doubtful Debts A/c			200
	To Stock A/c			600
	To Furniture A/c			550
	To Plant			9,000
	To Salaries Outstanding A/c			11,000
	To Rent Outstanding A/c			3,000
	To Liability A/c			2,400
	(Being the entry to decrease the value of assets and increase the value of liabilities)			

Date	Particulars		L.F.	Rs.	Rs.
1989 April 1	Unexpired Insurance Premium A/c	Dr.		350	
	Plant A/c	Dr.		*6,400	
	Building A/c	Dr.		50,000	
	To Revaluation A/c				56,750
	(Being entry to record increase in the value of assets)				
	Revaluation A/c	Dr.		30,000	
	To A's Capital A/c				15,000
	To B's Capital A/c				15,000
	(Being profit on revaluation of assets and liabilities transferred to Capital A/cs of A and B)				

Dr. REVALUATION ACCOUNT Cr.

1989		Rs.	1989		
April 1	To Reserve for D/D	200	April 1	By Unexpired Insurance	350
	To Stock	600		By Plant	*6,400
	To Furniture	550		By Building	50,000
	To Plant	9,000			
	To Salaries Outstanding	11,000			
	To Rent Outstanding	3,000			
	To Liability	2,400			
	To Profit to : A 15,000 B 15,000	30,000			
		56,750			56,750

* The value of Plant has been found out as follows :

Cost two years back	Rs. 10,000
Less Depreciation for first year @ 20%	2,000
	8,000
less Depreciation for second year @ 20%	1,600
Present Value	6,400

Illustration 16. The following was the Balance Sheet of A and B who were sharing profits as 2/3rds to A and 1/3rd to B on 1st April 1989 :

Liabilities	Rs.	*Assets*		Rs.
Capital Accounts :		Building		25,000
A	15,000	Plant and Machinery		17,500
B	10,000	Stock		10,000
Sundry Creditors	32,950	Sundry Debtors	5,000	
		Less Reserve	150	4,850
		Cash in Hand		600
	57,950			57,950

They agreed to admit C on the above date into the partnership on the following terms :

(*a*) C was to bring Rs. 7,500 as his capital and his one-fourth share of goodwill in the firm which is to be valued at 2 years' purchase of the last 3 years profits.

(*b*) Values of Stock and Plant and Machinery were to be reduced by 5%.

(*c*) Reserve for Bad and Doubtful Debts was to be raised to Rs. 525.

(*d*) Building was to be appreciated by 10%.

(*e*) Outstanding salaries on 1st April, 1989 amounted to Rs. 1,250, and prepaid insurance is Rs. 250.

(*f*) Goods purchased on credit from a supplier had been omitted, the amount being Rs. 650.

(*g*) The profits for the last 3 years are Rs. 10,000, 12,000, 9,500.

(*h*) The Goodwill money was to be retained in the business.

Pass Journal Entries to give effect to the above arrangements, prepare Revaluation Account, the Capital Accounts of the partners and the New Balance Sheet.

Solution:

Total of profits for the last 3 years

=Rs. 10,000+12,00+9,500=Rs. 31,500

Average =Rs. 31,500 ÷ 3= Rs. 10,500.

Value of goodwill =Rs. 10,500 × 2=Rs. 21,000.

C will, therefore, bring in 1/4th of Rs. 21,000, *i.e.*, Rs. 5,250 as his share of goodwill.

JOURNAL

1989			Rs.	Rs.
April 1	Revaluation A/c Dr.		3,650	
	To Stock A/c			500
	To Plant & Machinery A/c			875
	To Reserve for Bad & Doubtful Debts A/c			375
	To Salaries Outstanding A/c			1,250
	To Sundry Creditors			650
	(Being the entry to decrease the value of assets and increase the value of liabilities)			

1989			Rs.	Rs.
April 1	Building A/c	Dr.	2,500	
	Prepaid Expenses (Insurance) A/c	Dr.	250	
	To Revaluation A/c			2,750
	(Being the entry for increase in the value of assets)			
	A's Capital A/c	Dr.	600	
	B's Capital A/c	Dr.	300	
	To Revaluation A/c			900
	(Being the loss on revaluation of assets and liabilities transferred to Capital A/cs of A and B)			
	Cash	Dr.	12,750	
	To C's Capital A/c			12,750
	(Being the sum brought in by C on his admission, capital Rs. 7,500 goodwill Rs. 5,250)			
	C's Capital A/c	Dr.	5,250	
	To A's Capital A/c			3,500
	To B's Capital A/c			1,750
	(Being the amount brought in by C as goodwill transferred to Capital A/c of A and B in the ratio of sacrifice)			

Dr. **REVALUATION ACCOUNT** Cr.

1989		Rs.	1989		Rs.
April 1	To Stock	500	April 1	By Building	2,500
	To Plant & Machinery	875		By Prepaid Expenses (Insurance)	250
	To Reserve for Bad & Doubtful Debts	375		By Loss transferred to partners' Capital A/cs :	
	To Salaries Outstanding	1,250		Rs.	
	To Sundry	650		A 600	
				B 300	900
		3,650			3,650

Dr. **A's CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
April 1	To Revaluation A/c	600	April 1	By Balance b/d	15,000
	To Balance c/d	17,900		By Goodwill	3,500
		18,500			18,500

Dr.		B's CAPITAL ACCOUNT			Cr.
1989		Rs.	1989		Rs.
April 1	To Revaluation A/c	300	April 1	By Balance b/d	10,000
	To Balance c/d	11,450		By Goodwill	1,750
		11,750			11,750

Dr.		C's CAPITAL ACCOUNT			Cr.
1989		Rs.	1989		Rs.
April 1	To A's Capital A/c	3,500	April 1	By Cash	12,750
	To B's Capital A/c	1,750			
	To Balance c/d	7,500			
		12,750			12,750

BALANCE SHEET of A, B and C as on 1st April, 1989

Liabilities		Rs.	*Assets*		Rs.
Sundry Creditors		33,600	Cash in Hand		13,350
Outstanding Salaries		1,250	Prepaid Expenses		250
Capital Accounts			Sundry Debtors	5,000	
	Rs.		*Less* Reserves	525	
A	17,900				4,475
B	11,450		Stock		9,500
C	7,500		Plant & Machinery		16,625
			Building		27,500
		36,850			
		71,700			71,700

(2) Where adjusted values are not to be shown in books of account

Normally, the adjusted values of assets and liabilities are shown in the Balance Sheet prepared after the admission of a new partner. Such Balance Sheet will therefore show the values of assets and liabilities which may widely *differ* from the old values shown in the old Balance Sheet prepared immediately before the admission of the new partner. If this wide variation in the values (before and after admission) is to be avoided, the partners (including the new partner) may agree to show the assets and liabilities at *old* values. This is done in the following manner :

(*a*) The Revaluation Account in this case is called Memorandum Revaluation Account. It is prepared in two parts :

(*i*) The first part of the Memorandum Revaluation Account records the profit or loss on revaluation of assets and liabilities ; and any resultant profit or loss is transferred to the *Capital Accounts of the old partners in the old profit sharing ratio.*

(*ii*) In the second part of the Memorandum Revaluation Account all the entries made in the first part are reversed. For example, if the value of Furniture (book value Rs. 5,000) is agreed upon at Rs. 4,000, the entries will be as follows :

In the first part

Memorandum Revaluation A/c	Dr. 1,000	
To Furniture A/c		1,000
(Being the entry for loss on Furniture)		

In the second part

Furniture A/c	Dr. 1,000	
To Memorandum Revaluation A/c		1,000
(Being Reverse entry)		

The loss or profit (if the first part shows profit, the second part will show loss and *vice versa*) shown by the second part of Memorandum Revaluation Account will be transferred to the *Capital Accounts of all the partners, including the new partners, in the new profit sharing ratio.*

Illustration 17. Take the previous Illustration wherein it is now agreed that the altered values of assets (other than cash) and liabilities are not to be shown in the Balance Sheet.

You are required to prepare the Memorandum Revaluation Account, partners' Capital Accounts and a new Balance Sheet after C's admission.

Solution :

Dr. MEMORANDUM REVALUATION ACCOUNT Cr.

1989		Rs.	1989		Rs.
Apr.1	To Stock	500	Apr.1	By Building	2,500
	To Plant & Machinery	875		By Prepaid Expenses (Insurance)	250
	To Reserve for Bad & Doubtful Debts	375		By Loss transferred to Partners' Capital A/cs: Rs.	
	To Salaries Outstanding	1,250		A (2/3) 600	
	To Sundry Creditors	650		B (1/3) 300	900
		3,650			3,650

contd.

contd.

		Rs.			Rs.
1989 Apr.1	To Building	2,500	1989 Apr.1	By Stock	500
	To Prepaid Expenses (Insurance)	250		By Plant & Machinery	875
	To Profit transferred to Partners' Capital A/cs :			By Reserve for Bad & Doubtful debts	375
	A (1/2) 450			By Salaries Outstanding	1,250
	B (1/4) 225			By Sundry Creditors	650
	C (1/4) 225	900			
		3,650			3,650

Dr. CAPITAL ACCOUNTS Cr.

1989		A Rs.	B Rs.	C Rs.	1989		A Rs.	B Rs.	C Rs.
Apr.1	To Memorandum Revaluation A/c	600	300	—	Apr.1	By Balance b/d	15,000	10,000	7,500
	To Balance c/d	18,350	11,675	7,725		By Goodwill	3,500	1,750	—
						By Memorandum Revaluation A/c	450	225	225
		18,950	11,975	7,725			18,950	11,975	7,725

BALANCE SHEET of A, B and C as on 1st April, 1989

Liabilities		Rs.	*Assets*		Rs.
Sundry Creditors		32,950	Cash		13,350
Capitals:	Rs.		Sundry Debtors	5,000	
			Less Reserve	150	4,850
A	18,350		Stock		10,000
B	11,675		Plant & Machinery		17,500
C	7,725	37,750	Building		25,000
		70,700			70,700

4. RESERVE FUND AND ACCUMULATED PROFIT OR LOSS

(*a*) **Reserve Fund.** If there is any Reserve Fund which represents undistributed profit in the Balance Sheet, it is transferred to the Capital Accounts of the old partners in the *old profit sharing ratio*. The Journal Entry is as follows :

Reserve Fund A/c Dr.
To Capital A/cs of Old Partners
(in the old profit sharing ratio)
(Being the transfer of Reserve Fund to the Capital A/cs of old partners)

(*b*) **Balance of Profit or Loss.** If there is any balance of profit or loss appearing in the Balance Sheet, it is transferred to the Capital Accounts of the old partners in the *old profit sharing ratio.*

The Journal Entries in this case are as follows :

(*i*) *If there is a Profit :*

Profit and Loss Appropriation A/c Dr.
To Capital A/cs of Old Partners
(in the old profit sharing ratio)
(Being the transfer of Profit to the Capital A/cs of old partners)

(*ii*) *If there is a Loss :*

Capital A/cs of Old Partners
(in the old profit sharing ratio) Dr.
To Profit and Loss Appropriation A/c
(Being the transfer of Loss to the Capital A/cs of old partners)

6. ADJUSTMENT OF CAPITALS

Adjustment of capitals of old partners. Sometimes, the capitals of the old partners are adjusted on the basis of the capital of the incoming partner. In that case, first of all the capital of each of the old partners in the new firm is found out. If the capital account of an old partner (after all the adjustments relating to goodwill, revaluation of assets and liabilities, reserve fund etc., have been done) shows a balance smaller than his share of capital in the new firm, he brings in additional capital or the shortfall is transferred to his Current Account. If his capital account shows a balance larger than his share of capital in the new firm, he withdraws cash on account of the excess or the excess is transferred to his Current Account.

Illustration 18. Following is the Balance Sheet as at 31st March, 1989 of Messrs A and B who share profits in the proportion of three-fourths and one-fourth respectively :

BALANCE SHEET of A and B as at 31st March, 1989

Liabilities		Rs.	*Assets*		Rs.
Creditors		37,500	Cash		22,500
Bills Payable		15,000	Bills Receivable		3,000
General Reserve		4,000	Debtors	16,500	
Capital Accounts :			*Less* Reserve	500	
A	15,000				16,000
B	16,000		Stock		20,000
		31,000	Furniture		1,000
			Buildings		25,000
		87,500			87,500

They admit C into partnership on 1st April, 1989 on the following terms :

(*a*) C pays Rs. 10,000 as his capital for a fifth share in the future profits.

(*b*) Goodwill Account be raised in the books of the new firm at a value of Rs. 10,000 to give credit to the old partners.

(*c*) That Stock and Furniture be reduced by 10%.

(*d*) Value of Buildings be appreciated by 20%.

(*e*) A liability of Rs. 600 included in Sundry Creditors is not likely to arise.

(*f*) Reserve for Bad and Doubtful Debts be raised by a further amount of Rs. 300.

(*g*) The Capital Accounts of all the partners be readjusted on the basis of their profit sharing proportions and any additional amount to the credit or debit of any partner be immediately paid in cash to him or be brought in cash by him, as the case may be.

The above arrangements were fully carried out. You are required to write up—

(*i*) Profit and Loss Adjustment Account,

(*ii*) Partners' Capital Accounts,

(*iii*) Cash Account, and

(*iv*) Balance Sheet of the new firm as on 1st April, 1989.

Solution:

Dr. PROFIT AND LOSS ADJUSTMENT ACCOUNT Cr.

1989		Rs.	1989		Rs.
April 1	To Stock	2,000	April 1	By Buildings	5,000
	To Furniture	100		By Sundry Creditors	600
	To Reserve for B/D	300			
	To Profit : Rs. A 3/4 2,400; B 1/4 800	3,200			
		5,600			5,600

Dr. CAPITAL ACCOUNTS Cr.

1989		A Rs.	B Rs.	1989		A Rs.	B Rs.
April 1	To Cash		10,300	April 1	By Balance b/d	15,000	16,000
	To Balance c/d	30,000	10,000		By Goodwill	7,500	2,500
					By General Reserve	3,000	1,000
					By Profit and Loss Adjustment A/c	2,400	800
					By Cash	2,100	
		30,000	20,300			30,000	20,300
				1989 April 1	By Balance b/d	30,000	10,000

Dr. **C's CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
April 1	To Balance c/d	10,000	April 1	By Cash	10,000
		10,000			10,000
			1989 Apr. 1	By Balance b/d	10,000

Dr. **CASH ACCOUNT** Cr.

1989		Rs.	1989		Rs.
April 1	To Balance b/d	22,500	April 1	By B's Capital A/c	10,300
	To C's Capital A/c	10,000		By Balance c/d	24,300
	To A's Capital A/c	2,100			
		34,600			34,600
1989 April 1	To Balance b/d	24,300			

BALANCE SHEET of A, B and C as on 1st April, 1989

Liabilities		*Amount* Rs.	*Assets*		*Amount* Rs.
Creditors		36,900	Cash		24,300
Bills Payable		15,000	Bills Receivable		3,000
Capital Accounts :	Rs.			Rs.	
A	30,000		Debtors	16,500	
B	10,000		*Less* Reserve	800	
C	10,000				15,700
		50,000	Stock		18,000
			Furniture		900
			Buildings		30,000
			Goodwill		10,000
		1,01,900			1,01,900

A and B's capital in the new firm has been calculated as follows :

C's capital for 1/5th share in the new firm = Rs. 10,000.

Total capital of the new firm= Rs. 10,000 $\times \frac{5}{1}$ = Rs. 50,000.

Calculation of new profit sharing ratio :

C's share = 1/5 ; Remaining = $1-\frac{1}{5}=\frac{4}{5}$

A's share = $\frac{3}{4}$ of $\frac{4}{5}=\frac{3}{5}$; B's share = $\frac{1}{4}$ of $\frac{4}{5}=\frac{1}{5}$

New profit sharing ratio= $\frac{3}{5}:\frac{1}{5}:\frac{1}{5}$ or 3 : 1 : 1

A's capital in the new firm= $\frac{3}{5}$ of Rs. 50,000= Rs. 30,000

His capital after C's admission = Rs. 27,900.

So he brings in Rs. 30,000 – Rs. 27,900, *i.e.*, Rs. 2,100 in cash.

B's capital in the new firm = $\frac{1}{5}$ of Rs. 50,000 =Rs. 10,000.

His capital after C's admission= Rs. 20,300.

So he takes away Rs. 20,300 – Rs. 10,000, *i.e.*, Rs. 10,300.

Calculation of capital of new partner. Sometimes, the capital of the new partner is to be ascertained with the help of the capitals of the old partners. In such a case the total capital of old partners (after making the necessary adjustments on the admission of the new partner) is found out. This capital is regarded as earning old partners' share of the profit in the new firm. It is, therefore, regarded as so much share of the total capital as is the profit sharing ratio of the old partners in the new firm. On the basis of the old partners' share of profit, the capital of the new firm is ascertained. After this, the share of capital of the new partner can be found out.

Illustration 19. R and S, carrying on business in partnership and sharing profits and losses in the ratio of 5 : 3, admit a partner Y, on April 1, 1989 when their Balance Sheet stood as follows :

BALANCE SHEET as on April 1, 1989

Liabilities	Rs.	*Assets*	Rs.
Sundry Creditors	2,000	Cash	150
R's Capital	14,000	Debtors	7,600
S's Capital	8,400	Stock	5,100
		Furniture	1,550
		Building	10,000
	24,400		24,400

Y is given 1/8th share in future profits on the following terms :

(*a*) Goodwill is raised at an average of the last three years' profits, which amounted to Rs. 2,720, Rs. 5,020 and Rs. 5,700, and the old partners' Capital Accounts are increased accordingly.

(*b*) Stock is to be depreciated by Rs. 1,100 and Building is to be appreciated by Rs. 2,500.

(*c*) Y brings in sufficient cash to make up his capital equivalent to 1/8th capital of the new firm.

Show journal entries recording these transactions, Capital Accounts of partners and draw out the Balance Sheet of the new firm, stating the ratio in which the partners would share profits and losses in future.

Solution :

JOURNAL

Date	Particulars		L.F.	Rs.	Rs.
1989 April 1	Profit and Loss Adjustment A/c	Dr.		1,100	
	To Stock A/c				1,100
	(Being the entry to record decrease in the value of Stock)				
	Building A/c	Dr.		2,500	
	To Profit and Loss Adjustment A/c				2,500
	(Being the entry to record increase in the value of Buildings)				
	Profit and Loss Adjustment A/c	Dr.		1,400	
	To R's Capital A/c				875
	To S's Capital A/c				525
	(Being profit on revaluation of assets transferred to R and S in the ratio of 5 : 3)				
	Goodwill A/c	Dr.		4,480	
	To R's Capital A/c				2,800
	To S's Capital A/c				1,680
	(Being the entry for goodwill raised on Y's admission and credited to R and S in the ratio of 5 : 3)				
	Cash A/c	Dr.		4,040	
	To Y's Capital A/c				4,040
	(Being amount brought in by Y as his capital which is 1/7th of the combined capitals of R and S or 1/8th of total Capital)				

Dr. CAPITAL ACCOUNTS Cr.

		R	S	Y.	1989		R	S	Y
1989		Rs.	Rs.	Rs.			Rs.	Rs.	Rs.
Apr.1	To Bal. c/d	17,675	10,605	4,040	Apr.1	By Bal. b/d	14,000	8,400	
						By P & L. Adj. A/c	875	525	
						By Goodwill	2,800	1,680	
						By Cash			4,040
		17,675	10,605	4,040			17,675	10,605	4,040
					1989 Apr.1	By Bal. b/d	17,675	10,605	4,040

BALANCE SHEET OF R, S and Y as on 1st April, 1989

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Sundry Creditors		2,000	Cash	4,190
Capital Accounts :			Debtors	7,600
	Rs.		Stock	4,000
R	17,675		Furniture	1,550
S	10,605		Buildings	12,500
Y	4,040		Goodwill	4,480
		32,320		
		34,320		34,320

Y's Capital has been calculated as follows :

Capital of R and S in the new firm is Rs. 14,000 + Rs. 8,400 + Rs. 4,480 (goodwill)+Rs. 1,400 (profit on revaluation), *i.e.*, Rs. 28,280.

This is $\frac{7}{8}$th $\left(1-\frac{1}{8}=\frac{7}{8}\right)$ share of the capital of the new firm.

Therefore the capital of the new firm $= \frac{8}{7} \times$ Rs. 28,280

= Rs. 32,320

Y's Capital $= \frac{1}{8}$th of Rs. 32,320 = Rs. 4,040.

CHANGE IN PROFIT SHARING RATIO

When the partners decide to change in future the profit sharing ratio (*i.e.*, agree to share profits in future in a ratio different from the one in which they had been sharing profits hitherto), the partner or partners who gains/gain from such a change will have to compensate the partner or partners who loses/lose. As a result of the change some partners start getting a larger share. But this will naturally be at the cost of some other partner or partners. And it is also obvious that the partners who lose will agree to surrender a share of profit to other partner or partners only when they are compensated. This compensation is the proportionate share of goodwill. If, for example, a partner surrenders 1/6th share of profit, he will get from the partner who gains, compensation which will be an amount equivalent to 1/6th share of the total value of goodwill. This may be illustrated with the help of an example.

Suppose A and B are partners sharing profits and losses in the ratio of 3 : 2. They decide to share profits in future equally. The value of goodwill of the firm is Rs. 8,000. Here because of a change in the profit sharing ratio A loses and B gains.

A loses $= \frac{3}{5} - \frac{1}{2}$ (old ratio – new ratio) $= \frac{6-5}{10} = \frac{1}{10}$th share of profit.

B gains $= \frac{1}{2} - \frac{2}{5}$ (new ratio – old ratio)$= \frac{5-4}{10} = \frac{1}{10}$th share of profit.

B will therefore pay to A, an amount equivalent to 1/10th of the total value of goodwill, *i.e.*, 1/10th of Rs. 8,000, *i.e.*, Rs. 800. If the amount is not paid in cash, the following entry will be passed :

B's Capital A/c	Dr. 800	
To A's Capital A/c		800
(Being the amount of goodwill to be paid by B to A on change in the profit sharing ratio)		

Illustration 20. A, B and C are partners in a firm sharing profits and losses in the ratio of 3 : 2 : 1. With effect from 1st April, 1989 they agree that their profit sharing ratio will be 5 : 3 : 2. The goodwill of the firm is valued at Rs. 15,000.

Pass the necessary Journal Entries.

Solution:

The old profit sharing ratio is :

$A = \frac{3}{6}$ $B = \frac{2}{6}$ $C = \frac{1}{6}$

The new profit sharing ratio is :

$A = \frac{5}{10}$ $B = \frac{3}{10}$ $C = \frac{2}{10}$

Because of the change in the profit sharing ratio, A neither gains nor loses as

$\left(\frac{3}{6} - \frac{5}{10} \text{(old ratio – new ratio)} = 0\right)$.

B loses $= \frac{2}{6} - \frac{3}{10}$ (old ratio – new ratio) $= \frac{10-9}{30} = \frac{1}{30}$ th share of profit.

C gains $= \frac{2}{10} - \frac{1}{6}$ (new ratio – old ratio) $= \frac{6-5}{30} = \frac{1}{30}$th share of profit.

C will therefore have to compensate B to the extent of 1/30th share of goodwill, *i.e.*, $\frac{1}{30}$ th of Rs. 15,000 or Rs. 500.

The Journal Entry will be :

C's Capital A/c	Dr. 500	
To B's Capital A/c		500
(Being the amount of goodwill to be paid by C to B on change in the profit sharing ratio)		

Illustration 21. The Balance Sheet of A, B and C sharing profits and losses in the ratio of 3 : 2 : 1 as on 31st March, 1989, is as follows :

Liabilities	Amount Rs.	Assets	Amount Rs.
Creditors	20,000	Assets	50,000
Capitals :		Goodwill	30,000
A	30,000		
B	20,000		
C	10,000		
	80,000		80,000

From 1st April, 1989 they decide that profit sharing ratio among them and their capitals should be equal. The total capital of the firm is to remain Rs. 60,000. Any deficiency in capital of a partner is to be brought in cash and any surplus in capital of a partner is to be paid in cash.

Pass Journal Entries to record the above.

Solution:

The old profit sharing ratio :

$A = \frac{3}{6} \qquad B = \frac{2}{6} \qquad C = \frac{1}{6}$

The new profit sharing ratio :

$A = \frac{1}{3} \qquad B = \frac{1}{3} \qquad C = \frac{1}{3}$

Because of the change in profit sharing ratio, B neither gains nor loses $\left(\frac{2}{6} - \frac{1}{3} = 0\right)$

A loses $= \frac{3}{6} - \frac{1}{3} = \frac{2-1}{6} = \frac{1}{6}$ th share of profit.

C gains $= \frac{1}{3} - \frac{1}{6} = \frac{2-6}{1} = \frac{1}{6}$ th share of profit.

C will, therefore, have to compensate A to the extent of 1/6th share of goodwill, *i.e.*, 1/6th of Rs. 30,000 or Rs. 5,000.

The Journal Entries will be as follows :

1989			Rs.	Rs.
April 1	C's Capital A/c Dr.		5,000	
	To A's Capital A/c			5,000
	(Being the amount of goodwill to be paid over by C to A for acquiring 1/6th additional share of profit to make profit sharing ratio equal)			
	Cash A/c Dr.		15,000	
	To C's Capital A/c			15,000
	(Being amount brought in cash by C to make up his capital to Rs. 20,000 which is 1/3rd of Rs. 60,000)			

1989			Rs.	Rs.
April 1	A's Capital A/c Dr.		15,000	
	To Cash A/c			15,000
	(Being surplus capital paid to A to bring it down to Rs. 20,000 which is 1/3rd of Rs. 60,000)			

It should be noted that the profit sharing ratio and capital of B, being 1/3rd, remain unaffected.

TEST QUESTIONS

1. What is meant by 'goodwill' in a partnership ? How is its value determined ?

2. What is 'Goodwill' ? Explain the following methods of calculating goodwill of a partnership firm :

(*i*) Purchase of a certain number of years' average profit method.

(*ii*) Super-Profits method. (*Delhi SSCE, 1982*)

3. On what occasions does the need for valuation of goodwill arise ? (*All India SSCE, 1983*)

4. Explain the accounting treatment of 'Goodwill' when at the time of admission, the new partner cannot bring his share of goodwill in cash. (*Delhi SSCE, 1986*)

5. What is goodwill ? Discuss the different modes of treatment of goodwill on the admission of a partner. (*All India SSCE, 1982*)

6. Explain the accounting treatment of 'Goodwill' when at the time of admission, the new partner brings in his share of goodwill in cash. State also the ratios in which the old partners will share this amount of goodwill. (*All India SSCE, 1989*)

7. Describe briefly any two methods of valuation of goodwill. (*All India SSCE 1985, 87; Delhi SSCE, 1988, 89*)

8. Distinguish between :

(*i*) Revaluation Account and Memorandum Revaluation Account.

(*ii*) Average profit and super-profit method of valuation of goodwill. (*Delhi SSCE, 1985*)

9. What is 'Goodwill' ? When does it arise in partnership books ? Explain the methods of recording goodwill in partnership books on the admission of a new partner.

10. What is Profit and Loss Adjustment Account ? What is the object of opening this account ?

11. What is Revaluation Account ? Why is it prepared ?

12. Why are assets and liabilities revalued on the admission of a partner ? Do you think such a revaluation would be necessary if there is a change in the profit sharing ratio of the partners ? If so, give reasons.

13. Is it necessary to revalue the assets and liabilities of a firm if there is a change in the profit-sharing ratio of the existing partners ? Give reasons. *(All India SSCE, 1987 ; Delhi SSCE, 1989)*

14. How will you deal with the following cases in partnership ? Take imaginary figures to illustrate your answer.

(1) A change in the profit-sharing ratio among the existing partners.

(2) Accumulated profits and losses at the time of admission of a partner. *(All India SSCE, 1984)*

15. What is meant by adjustment of capital of old partners on the basis of capital of an incoming partner ? How is this done ?

16. Answer briefly the following questions :

(*a*) How is the capital of a new partner calculated on the basis of capital of the old partners ? Illustrate.

(*b*) How is the change in profit-sharing ratio of existing partners dealt with in books of account ?

PRACTICAL EXERCISES—I

ADMISSION OF A PARTNER

1. A and B are partners sharing profits in the ratio of 5 : 3. C is admitted to the partnership for 1/4th share of the future profits. Calculate the new profit-sharing ratio and sacrifice ratio. *(All India SSCE, 1980)*

(*Ans.* New Profit Sharing Ratio 15 : 9 : 8).

2. (*a*) A and B were the partners sharing profits in the ratio of 7 : 3. C was admitted on 3/7th share in the profits. Calculate the new profit-sharing ratio of the partners. *(Adapted from Delhi SSCE, 1980)*

(*b*) X and Y are partners in a firm sharing profits and losses in the ratio of 9 : 6. A new partner Z is admitted. X surrenders 3/15th share of his profit in favour of Z and Y 2/15th of his share in favour of Z. Calculate the new profit-sharing ratio. *(Delhi SSCE, 1980)*

(*c*) A and B partners in a firm sharing profits and losses in the ratio of 3: 2. A new partner C is admitted. A surrenders 2/5th share of his profit in favour of C and B 1/5 of his share in favour of C. Calculate the new profit-sharing ratio of the partners. *(Adapted from Delhi SSCE, 1980, Comptt.)*

[*Ans.* (*a*) New Profit Sharing Ratio 14 : 6 : 15. (*b*) New Profit Sharing Ratio 36 : 26 : 13. (*c*) New Profit Sharing Ratio 9 : 8 : 8].

3. A and B are in partnership sharing profits and losses as two-thirds and one-third respectively. They agree to admit C as a partner on the condition that he brings in Rs. 8,000 of which Rs. 2,400 is to be regarded as premium for Goodwill for his 1/4th share of profit ; the money, however, is to remain in the business.

Make necessary entries in the books of the firm.

(*Ans.* Share of Goodwill : A Rs. 1,600, B Rs. 800).

4. A and B are in partnership sharing profits and losses equally. They admit C as a partner who brings in Rs. 10,000 as capital and Rs. 6,000 as goodwill for his 1/4th share of profit which he acquires from A and B—

(*i*) equally.

(*ii*) in the ratio of 1 : 2 respectively,

(*iii*) in the ratio of 1 : 3 respectively,

(*iv*) in the ratio of 2 : 1 respectively,

(*v*) in the ratio of 3 : 1 respectively,

(*vi*) in the ratio of 2 : 3 respectively,

Pass the necessary entries in all the cases.

[*Ans.* Share of Goodwill :

	A	B
	Rs.	Rs.
(*i*)	3,000	3,000
(*ii*)	2,000	4,000
(*iii*)	1,500	4,500
(*iv*)	4,000	2,000
(*v*)	4,500	1,500
(*vi*)	2,400	3,600].

5. (*a*) What will be the entries, in Question No. 4 if C does not bring his share of goodwill in cash, but A land B raise Goodwill Account in the books at Rs. 24,000.

(*b*) What will be the entries in the above case if goodwill already appears in books of account at—(*i*) Rs. 12,000, (*ii*) Rs. 36,000, (*iii*) Rs. 8,000.

[*Ans.* (*a*) Credit A and B with Rs. 12,000 each. (*b*) (*i*) Credit A and B with Rs. 6,000 each. (*ii*) Debit A and B with Rs. 6,000 each. (*iii*) Credit A and B with Rs. 8,000 each].

6. From the following particulars, calculate the new profit-sharing ratios of the partners :

(*a*) A and B are the partners sharing profits in the ratio of 5 : 3. C is admitted for 1/6th share in the profits.

(*b*) A, B and C are partners sharing profits in the ratio of 5 : 3 : 1. They admit D who acquires 1/9th share from A. (*Adapted from Delhi SSCE, 1982*)

[*Ans.* New Profit Sharing Ratio : (*a*) 25 : 15 : 8 (*b*) 4 : 3 : 1 : 1].

7. A and B are in partnership sharing profits in the ratio of 3 : 2. They admit C into partnership on his paying Rs. 4,000 as goodwill for a one-fourth share of the profits. As between themselves, A and B agree to share future profits and losses equally.

Show by means of a journal entry, the apportionment of goodwill between A and B.

(*Ans.* Share of Goodwill : A Rs. 3,600, B Rs. 400).

8. A and B are in partnership, sharing profits in the ratio of 2 : 1. They admit their manager C as a partner in consideration of his paying to A and B a premium of Rs. 3,000 which is withdrawn by A and B. C introduces a capital of Rs. 5,000 and is to receive a share of the profits equal to one-fourth that of A in the new firm, the proportion between A and B remaining the same.

Set out the entries required to give effect to the above arrangement, and show the division of the first year's profit which is Rs. 7,200 between A, B and C.

(*Ans*. Share of Goodwill : A Rs. 2,000 ; B Rs. 1,000. Division of Profit : A Rs. 4,000 ; B Rs. 2,000 ; C Rs. 1,000. New Profit Sharing Ratio 4 : 2 : 1).

9. A and B sharing profit and losses in the ratio of 3 : 2 admit C into partnership, C paying Rs. 1,000 as goodwill for 1/4th share and Rs. 10,000 as capital. No goodwill account appears in the books. Partners withdraw the amount of goodwill.

Give journal entries to record these transactions. (*Delhi SSCE, 1989*)

(*Ans*. Share of Goodwill : A Rs. 600, B Rs. 400).

10. (*a*) Calculate the amount of Goodwill in the following cases :

(*i*) Three years' purchase of the last five years' average profits. The profits for the last five years' are :

I year	... Rs. 4,800
II year	... Rs. 7,200
III year	... Rs. 10,000
IV year	... Rs. 3,000
V year	... Rs. 5,000

(*Delhi SSCE, 1981*)

(*b*) Three years' purchase of the last four years' average profits. The profit and losses for the last four years are :

	Rs.	
I year ...	5,000	
II year ...	8,000	
III year ...	3,000	(Loss)
IV year ...	6,000	

(*Delhi SSCE, 1982*)

(*c*) The average Net Profits expected in the future by ABC Firm are Rs. 36,000 per year. The average capital employed in the business by the Firm is Rs. 2,00,000. The rate of interest expected from capital invested in this class of business is 10% The remuneration of the partners is estimated to be Rs. 6,000 per annum.

Find out the va ıe of goodwill on the basis of two years' purchase of Super Profits. (*Delhi SSCE, 1986*)

[*Ans*. (*a*) Rs. 18,000, (*b*) Rs. 12,000, (*c*) Rs. 20,000].

11. Calculate the goodwill by year's purchase of average profits method if the profits for 1987, 1988 and 1989 are Rs. 6,000, Rs. 8,000 and Rs. 7,000, and the value of goodwill is at two years' purchase.

(*Adapted from All India SSCE, 1979, Comptt.*)

(*Ans*. Rs. 14,000).

12. A and B are equal partners. They admit C into partnership and allow him one-eighth share of the profits, such share to be borne by A, who was relieved of active management in the firm.

Show the division of the profit for the first year which is Rs. 8,000.

(*Ans*. Division of Profit : A Rs. 3,000 ; B Rs. 4,000 ; C Rs. 1,000).

13. A and B are partners. They admit C into partnership, agreeing to share profits in future as 3 : 2 : 1. It is agreed, however, that C's share of

profits shall not be less than Rs. 6,000 in any one year. The profit for the first year was Rs. 32,400.

Show the division of profits.

(*Ans.* Division of Profit : A Rs. 15,840 ; B Rs. 10,560 ; C Rs. 4,000).

14. (*a*) Why are the assets and liabilities revalued on the admission of a new partner ?

(*b*) A and B are partners sharing profits and losses in the proportion of 3 : 2. They agree to admit C into partnership who is to get 1/5th share in the business. C brings in Rs. 10,000 for his capital and Rs. 4,000 for the 1/5th share of goodwill which he acquires 3/20th from A and 1/20th from B.

The profit for the first year of the new partnership amounted to Rs. 20,000.

Make the necessary journal entries in connection with C's admission and apportion the profit between the partners.

(*Ans.* Share of Goodwill : A Rs. 3,000 ; B Rs. 1,000. Division of Profit: A Rs. 9,000 ; B Rs. 7,000 ; C Rs. 4,000).

15. Raja commenced business with a capital of Rs. 2,50,000 on 1st April, 1984. During the five years ending 31st March, 1989, the following profits and losses were made :

31st March, 1985	Loss Rs. 5,000
31st March, 1986	Profit Rs. 13,000
31st March, 1987	Profit Rs. 17,000
31st March, 1988	Profit Rs. 20,000
31st March, 1989	Profit Rs. 25,000

During this period he had drawn Rs. 40,000 for his personal use. On 1st April, 1989 he admitted Rani into partnership on the following terms :

Rani to bring for her half share in the business capital equal to Raja's capital on 31st March 1989 and to pay for one-half share of goodwill of the business, on the basis of three times the average profits of the last five years.

Prepare a statement showing what amount Rani should invest to become a partner.

(*Ans.* Rani shall have to invest Rs. 3,01,000 on account of Capital and Rs. 21,000 on account of Goodwill).

16. A and B are carrying on business in partnership sharing profits and losses in the ratio of 3 : 2 respectively. On 31st March 1989, their Balance Sheet stood as follows :

Liabilities	Rs.	*Assets*	Rs.
A's Capital	30,200	Land and Building	40,000
B's Capital	35,400	Furniture	10,600
Bank Loan	20,000	Stock	38,500
Sundry Creditors	20,800	Sundry Debtors	19,000
Bills Payable	10,000	Cash	8,300
	1,16,400		1,16,400

C was admitted to partnership on the following conditions :

(*i*) C would be entitled to one-third share in profits.

(*ii*) C would bring Rs. 30,000 as capital and Rs. 10,000 as his share of goodwill.

(*iii*) The book value of Land and Buildings would be increased by Rs. 10,000 and a Provision for Bad Debts @ 5% of Sundry Debtors would be created.

(*iv*) Bank Loan would be paid off.

You are required to :

(*i*) prepare Revaluation Account, Cash Book and partners' Capital Accounts.

(*ii*) show initial Balance Sheet of the new firm.

(*Adapted from Delhi SSCE 1987*)

(*Ans.* Profit on Revaluation Rs. 9,050. Capitals of A and B Rs. 41,630 and Rs. 43,020. Balance Sheet Total Rs. 1,45,450).

17. Vimal and Nirmal are partners in a firm sharing profits and losses in the ratio of 3 : 2. On 31st March, 1989 the position of the business was as follows :

BALANCE SHEET

Liabilities	Rs.	*Assets*	Rs.
Sundry creditors	20,000	Cash	14,000
Capital Accounts :		Debtors	18,000
Vimal	60,000	Plant and Machinery	50,000
Nirmal	32,000	Stock	40,000
Profit and Loss A/c	10,000		
	1,22,000		1,22,000

On this day, Kailash agrees to join the business on the following terms and conditions :

(*i*) He will introduce Rs. 40,000 as his capital and pay Rs. 20,000 to the existing partners for his share of goodwill.

(*ii*) The new profit sharing ratio is 2 : 1 : 1 respectively for Vimal, Nirmal and Kailash.

(*iii*) A revaluation of the assets will be made by reducing Plant and Machinery to Rs. 35,000 and Stock by 10%. Provision of Rs. 1,000 is to be created for bad and doubtful debts.

(*iv*) Goodwill Account is not to be raised.

Pass journal entries for the above arrangement and give the Balance Sheet of the newly constituted firm. Also specify the sacrificing ratio.

(*Adapted from All India SSCE, 1984*)

(*Ans.* Loss on Revaluation Rs. 20,000. Capitals of Vimal Rs. 62,000, Nirmal Rs. 40,000. Balance Sheet Total Rs. 1,62,000).

18. M and N are partners in a firm sharing profits and losses in the ratio of 5 : 3. On 31st March, 1989, their Balance Sheet was as under :

Sundry Creditors		4,000	Machinery	12,000
Bills Payable		2,000	Stock	8,000
Capitals :			Sundry Debtors	7,200
	M	12,000	Bank Balance	500
	N	10,000	Cash in Hand	300
		28,000		28,000

On the above date, the partners decide to admit R as partner on the following terms :

(*a*) The new profit sharing ratio of M, N and R will be 7 : 6 : 4, respectively.

(*b*) R shall bring Rs. 8,000 as his capital and Rs. 5,600 for his share of goodwill.

(*c*) M and N will draw half of the goodwill in cash.

(*d*) Machinery is to be revalued at Rs. 15,000, Stock at Rs. 10,000 and a provision for bad debts of Rs. 600 is to be created.

(*e*) There is a liability of Rs. 2,000, being the outstanding salary payable to employees of the firm. This liability is not included in the creditors. Partners decide to show this liability in the books of account of the new firm.

Prepare Revaluation Account, Partner's Capital Accounts and the Balance Sheet of M, N and R. (*Adapted from Delhi SSCE, 1986*)

(*Ans.* Profit on Revaluation Rs. 2,400. Capitals of M and N Rs. 17,125 and Rs. 10,075. Balance Sheet Total Rs. 43,200).

19. The following was the Balance Sheet of A and B who were sharing profits in the ratio of 2 : 1 on 31st March, 1989 :

Liabilities		Rs.	*Assets*	Rs.
Sundry Creditors		65,900	Buildings	50,000
General Reserve		30,000	Plant and Machinery	35,000
Capital Accounts :			Stock	20,000
A	30,000		Sundry Debtors	9,700
B	20,000		Cash in Hand	1,200
		50,000	Bank	30,000
		1,45,900		1,45,900

On this date C was admitted into the partnership on the following terms:

(*a*) C was to bring Rs. 15,000 as his capital and Rs. 6,000 as goodwill for one-fourth share in the firm.

(*b*) That the values of the Stock and Plant and Machinery were to be reduced by 5%.

(*c*) That a Reserve of Rs. 750 was to be created in respect of Sundry Debtors.

(*d*) That the Building Account was to be appreciated by 10%.

(*e*) That Goodwill money was to be retained in the business.

(*f*) Prepaid expenses and outstanding expenses on 31st March, not taken into account, were Rs. 300 and Rs. 900 respectively.

Prepare Profit and Loss Adjustment Account (Revaluation Account), Partners' Capital Accounts, and Balance Sheet of New Firm.

(*Adapted from DSSCE, 1981*)

(*Ans.* Profit on Revaluation Rs. 900. Capitals of A and B Rs. 54,600 and Rs. 32,300. Balance Sheet Total Rs. 1,68,700).

20. The following was the Balance Sheet of R and S, who were sharing profits and losses in the ratio of 3 : 2, on 31st March, 1989 :

BALANCE SHEET of R and S as at 31st March 1989

Liabilities	Rs.	*Assets*	Rs.
Bills Payable	5,000	Cash	2,000
Sundry Creditors	10,000	Bank	1,000
Reserve Fund	10,000	Sundry Debtors	7,000
Capital Accounts :		Furniture	2,000
R Rs. 30,000		Plant and Machinery	3,000
S Rs. 20,000		Stock	10,000
	50,000	Land and Buildings	50,000
	75,000		75,000

The partners agreed to admit T into partnership on 1st April, 1989 on the following terms :

(*a*) T was to be given 1/6th share in the profits (which he acquired equally from R and S) and was to bring Rs. 25,000 as his Capital and Rs. 5,000 as his share of Goodwill. Half the amount of Goodwill was withdrawn by the partners.

(*b*) That the value of Plant and Machinery be depreciated by 10%.

(*c*) That the value of Furniture and Stock be depreciated by 5%.

(*d*) That the Land and Building be valued at Rs. 60,000.

(*e*) A provision of 5% was to be created for Bad and Doubtful Debts on Sundry Debtors.

(*f*) Outstanding expenses not provided for are Rs. 750.

Prepare a Revaluation Account (Profit and Loss Adjustment Account), Capital Accounts of Partners and the Balance Sheet of the New Firm.

(*Adapted from DSSCE, 1982*)

(*Ans.* Profit on Revaluation Rs. 8,000. Capitals of R and S Rs. 42,050 and Rs. 28,450. Balance Sheet Total Rs. 1,11,250).

21. The following is the Balance Sheet of Gupta and Mathur on 31st March, 1989. They share profits and losses in the proportion of three-fourths and one-fourth :

Liabilities	Rs.	*Assets*	Rs.
Creditors	70,000	Business Premises	50,000
Bills Payable	5,000	Fixtures	2,000
General Reserve	8,000	Stock	20,000
Capital Accounts :		Book Debts	32,000
Gupta 60,000		Bills Receivable	6,000
Mathur 32,000		Cash at Bank	40,000
	92,000	Cash in Hand	25,000
	1,75,000		1,75,000

They admit Agarwal into partnership on 1st April, 1989 on the following terms :

(*i*) That Agarwal brings Rs. 20,000 as his capital for a fifth share in the future profits.

(*ii*) That a Goodwill Account be raised in the books of the firm at a value of Rs. 40,000.

(*iii*) That the value of Business Premises be appreciated by 20%.

(*iv*) That the Stock and Fixtures be reduced by 10% each and a 5% reserve for doubtful debts be created on book debts.

(*v*) Creditors include a contingent liability of Rs. 4,000 which has been decided by the Court at Rs. 2,300.

Prepare the Revaluation Account, Partners' Capital Accounts and also the opening Balance Sheet of the firm. (*Adapted from All-India SSCE, 1983*)

(*Ans*. Profit on Revaluation Rs. 8,000. Capitals of Gupta and Mathur Rs. 1,02,000 and Rs. 46,000. Balance Sheet Total Rs. 2,41,300).

22. The following was the Balance Sheet of A, B and C sharing profits and losses in the proportion of 6/14, 5/14 and 3/14 respectively :

BALANCE SHEET of A, B and C as on 31st March, 1989

Liabilities		Amount	*Assets*	Amount
		Rs.		Rs.
Creditors		18,900	Land and Buildings	50,400
Bills Payable		6,300	Furniture	7,350
Capital Accounts :			Stock	29,400
A	Rs. 39,000		Debtors	26,460
B	Rs. 33,600		Cash	1,890
C	Rs. 17,700			
		90,300		
		1,15,500		1,15,500

On 1st April, 1989, they agreed to take D into partnership and give him one-eighth share on the following terms :

(*a*) That D should bring in Rs. 14,700 as his capital.

(*b*) That Furniture be depreciated by Rs. 920.

(*c*) That Stock be depreciated by 10 per cent.

(*d*) That a reserve of Rs. 1,320 be made for an outstanding repair bill.

(*e*) That the value of Land and Buildings having appreciated be brought upto Rs. 65,100.

(*f*) That a Goodwill Account be raised at Rs. 8,820 and adjusted in old partners' Capital Accounts.

(*g*) That after making the above adjustments the Capital Accounts of the old partners (who continue to share in the same proportion as above) be adjusted on the basis of the proportion of D's Capital to his share in the business.

Pass journal entries to give effect to the above arrangements and prepare the opening Balance Sheet of the firm as newly constituted.

(*Ans.* Profit on Revaluation Rs. 9,520. Capitals of A, B and C Rs. 44,100, Rs. 36,750 and Rs. 22,050. A withdraws Rs. 2,760, B withdraws 3,400 and C brings in Rs. 420. Cash Balance Rs. 10,850. Balance Sheet Total Rs. 1,44,120).

23. The following is the Balance Sheet of Sethi and Sobti who share profits and losses in the ratio of 3 : 2 respectively :

Liabilities		Rs.	*Assets*		Rs.
Sundry Creditors		2,95,000	Buildings		3,50,000
Capital Accounts :			Plant		4,50,000
Sethi	8,00,000		Stock		3,50,000
Sobti	3,50,000		Book Debts	2,50,000	
		11,50,000	*Less* Reserve	5,000	
					2,45,000
			Cash at Bank		50,000
		14,45,000			14,45,000

They agreed to admit Mahajan into partnership giving him a fifth share on the following terms :

(*a*) The value of Buildings to be increased by Rs. 1,50,000.

(*b*) The value of Plant to be increased by Rs. 1,00,000.

(*c*) Goodwill to be valued at Rs. 2,00,000.

(*d*) Mahajan to bring in Capital to the extent of one-fifth of the total Capital of the new firm after adjustments.

Show the Journal and Ledger entries recording these adjustments and prepare the Balance Sheet of the new firm, assuming that Mahajan has brought in the requisite cash. State the proportion in which the profits and losses will be divided in future. Also show the calculation of Mahajan's Capital.

(*Ans.* Balance Sheet Total Rs. 22,95,000 ; Mahajan's Capital Rs. 4,00,000. New profit sharing ratio 12 : 8 : 5).

24. The following is the Balance Sheet of P and S trading as P & S Co., on 31st March, 1989, profit being divided 3/5ths to P and 2/5ths to S :

BALANCE SHEET as on 31st March, 1989

Liabilities	Amount	*Assets*	Amount
	Rs.		Rs.
P's Capital	7,000	Debtors	4,400
S's Capital	4,000	Building	3,000
Sundry Creditors	3,000	Plant	5,000
		Bank	1,600
	14,000		14,000

They agree to admit a new partner R on 1st April, 1989 and following arrangements are made :

(*a*) Goodwill to be created, amounting to Rs. 3,500, to be credited to P and S in the same proportions as they divide profits.

(*b*) The Building and Plant are independently valued at Rs. 3,500 and Rs. 5,870 respectively, the increased values to be credited to P and S.

(*c*) A reserve of 5% is to be created on Debtors.

(*d*) Unexpired insurance on this date amounts to Rs. 350.

(*e*) R to bring Rs. 4,000 cash as his Capital.

(*f*) All partners to be credited with 16% interest per annum on Capital and to be charged 16% interest per annum on Drawings, which amount to Rs. 200 a month drawn by each partner at the end of each month.

(*g*) Profit to be divided in the proportion of 5 : 3 : 2. The profit to 30th September, 1989, before allowing or charging interest was Rs. 15,000.

Prepare the Balance Sheet and Partner's Capital Accounts as on 30th September, 1989.

(*Ans.* Balance Sheet Total Rs. 34,400 ; Capitals : P Rs. 16,320, S Rs. 9,296; R Rs. 5,784).

CHANGE IN PROFIT-SHARING RATIO

25. The following is the Balance Sheet of A and B, who share profits and losses in the ratio of 3 : 1, as on 31st March, 1989 :

BALANCE SHEET as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Creditors	3,278	Sundry Assets	18,278
Capital :			
A	10,000		
B	5,000		
	18,278		18,278

As from 1st April, 1989, the partners agree to share profits and losses equally and for this purpose they value the firm's goodwill at Rs. 8,000.

Give the necessary journal entries for giving effect to this change and the Balance Sheet as on 1st April, 1989.

(*Ans*. Debit B and credit A with Rs. 2,000. No change in Balance Sheet Total).

26. (*a*) The firm of A, B and C who have been sharing profits in the ratio of 2 : 2 : 1 respectively, has existed for some years. C wants that he should share equally in the profits with A and B and he further wants that the change in the profit sharing ratio should come into effect retrospectively for the last three years. A and B have no objection to this. The profits for the last three years were Rs. 26,000, Rs. 22,100 and Rs. 25,805.

Show the adjustment of profits for the last three years by means of journal entries. *(Delhi SSCE, 1979 Comptt.)*

(*b*) C agrees to compensate A and B through Goodwill which for this purpose is valued at Rs. 30,000. Pass the necessary Journal Entry.

[*Ans.* (*a*) Debit A and B with Rs. 4,927 each. Credit C with Rs. 9,854. (*b*) Debit C with Rs. 4,000 and credit A and C with Rs. 2,000 each].

27. (*a*) X, Y and Z were partners sharing profits and losses in the ratio of 4 : 3 : 2. Goodwill does not appear in the books but it is Rs. 36,000. The partners decide to share future profits in equal proportions.

Give a journal entry to record the above change. Also indicate each partner's gain or loss due to change in the ratio. Show your working clearly.

(*Delhi SSCE, 1985*)

(*b*) E, F and G have been in business for ten years. They have always shared profits equally. No Goodwill Account has ever existed in the books. On 31st March, 1989 they agree that G will take only a one-fifth share of the profit as from 1st April, 1989, this being due to the fact that he will be devoting less of his time to the business in future. E and F then each take two-fifths of the profits.

The partners agree that the goodwill should be valued at Rs. 30,000.

Give necessary jounral entries to record the above arrangement when goodwill account is not opened.

Show also your calculations. (*Adapted from, Delhi SSCE, 1984*)

[*Ans.* (*a*) Debit Z with Rs. 4,000. Credit X with Rs. 4,000. (*b*) Debit E and F with Rs. 2,000 each and credit G with Rs. 4,000].

28. A and B are partners sharing profit and losses in the ratio 3 : 2. They employed C as their manager to whom they paid a salary of Rs. 750 per month. C had deposited Rs. 20,000 on which interest was payable @ 9% per annum. On 31st March, 1989 (after division of the year's profits) it was decided that C should be treated as a partner with effect from 1st April, 1985, with 1/6 share of profits, his deposit being considered as capital carrying interest at 6% per annum like capitals of other partners. The firm's profits and losses after allowing interest on capital were as follows :

1985-86	Profit	Rs. 59,000
1986-87	Profit	62,600
1987-88	Loss	4,000
1988-89	Profit	78,000

Record the necessary journal entries to give effect to the above.

(*All India SSCE, 1980*)

(*Ans.* Debit A and B with Rs. 360 and Rs. 240. Credit C with Rs. 600).

PRACTICAL EXERCISES—II

1. A and B are in partnership sharing profits and losses in the ratio of 5 : 3. C is admitted as a partner who pays Rs. 40,000 as capital and the necessary amount for goodwill which is valued at Rs. 60,000 for the firm. His share of profit will be 1/5th which he takes 1/10th from A and 1/10th from B.

Pass Journal entries. Calculate also the future profit sharing ratio of the partners.

(*Ans.* Credit A and B with Rs. 6,000 each on account of Goodwill. Future profit-sharing ratio 21 : 11 : 8).

2. A, B and C are partners sharing profits in the ratio of 4 : 3 : 2. D is admitted for 2/9th share of profits and brings Rs. 10,000 as his capital and

Rs. 10,000 for his share of goodwill. The new profit sharing ratio between A, B, C, D will be 3 : 2 : 2 : 2.

After D's admission, it was decided that goodwill should be raised in the books at its full value.

Journalise the above arrangement in the books. (*Delhi SSCE, 1983*)

(*Ans*. Goodwill amount of Rs. 10,000 brought in by D will be credited to A and B as Rs. 5,000 each. Full value of Goodwill Rs. 45,000 to be credited to A, B C, and D as Rs. 15,000, Rs. 10,000, Rs. 10,000 and Rs. 10,000 respectively).

3. A and B are partners. They admit C as a partner on the understanding that his share of profit shall not in any year be less than Rs. 2,400. Profits are shared as to A 50 per cent, B 40 per cent and C 10 per cent. The profits for the year ending 31st March, 1989 amounted to Rs. 15,900.

Show the Profit and Loss Account (Appropriation Section) for the year ending 31st March, 1989.

(*Ans*. Division of Profit : A Rs. 7,500 ; B Rs. 6,000 ; C Rs. 2,400).

4. P and S are partners sharing profits in the ratio of 3 : 2. Their books showed goodwill at Rs. 20,000. R is admitted with 1/5th share which he acquires equally from P and S. R brings Rs. 20,000 as his capital and Rs. 10,000 as his share of goodwill. Profits at the end of the year were of the amount of Rs. 1,00,000.

You are required to give journal entries to carry out the above arrangement. (*Delhi SSCE, 1983, Comptt.*)

(*Ans*. Goodwill—P Rs. 5,000, S Rs. 5,000. Profit— P Rs. 50,000, S Rs. 30,000, R Rs. 20,000).

5. A and B are in partnership, sharing profits and losses as 2/3rds and 1/3rd respectively.

They agree to admit C and D into partnership on the following conditions :

(*i*) C is to bring into the business Rs. 18,000, Rs. 2,400 of which is to be regarded as premium for admission, but is to be paid out to the partners A and B in the proportion in which they are entitled to share it ;

(*ii*) D is to bring Rs. 18,000, Rs. 2,400 of which is to be regarded as premium for goodwill, the money, however, remaining in the business.

C and D are given 1/8th share of profit each.

Make the necessary entries in the books, and show the effect of these on the Balance Sheet just after the admission of the new partners.

(*Ans*. Balance Sheet Total will increase by Rs. 33,600).

6. Give journal entries to record the following arrangements in the books of a firm :

(*a*) A and B are partners sharing profits in the ratio of 4 : 3. They admit C into partnership for 1/5th share who pays Rs. 3,500 in cash for goodwill. A and B decide to share future profits equally among themselves. No goodwill account appears in the books.

(*b*) A, B and C are partners sharing profits in the ratio of 9 : 6 : 5. Goodwill does not appear in the books but is agreed to be worth Rs. 10,000.

Partners decide to share future profits in the ratio of 3 : 5 : 2 respectively. They do not open goodwill account for this at all.

(*c*) A, B and C are partners sharing profits in the ratio of 3 : 2 : 1. Goodwill does not appear in the books but it is agreed to be worth Rs. 12,000. D is admitted and the partners decide to share future profits equally. D does not bring his share of goodwill in cash.

[*Ans.* (*a*) A and B will be credited with Rs. 3,000 and Rs. 500 on account of Goodwill. (*b*) Debit B with Rs. 2,000. Credit A and C with Rs. 1,500 and Rs. 500 respectively. (*c*) Debit Goodwill A/c with Rs. 12,000 and credit A, B and C with Rs. 6,000, Rs. 4,000 and Rs. 2,000 respectively].

7. Mukesh and Rajesh are sharing profits in the ratio of 2 : 1. Their capitals are Rs. 5,000 and Rs. 4,000 respectively. They admit Somesh to a one-third share in the profits of the firm on his bringing Rs. 1,000 for goodwill and Rs. 4,000 as his capital.

Profits will now be shared between Mukesh, Rajesh and Somesh equally.

Assuming that a goodwill account is raised after Somesh's admission and kept at its full value, and also assuming that there are no creditors of the firm, give (*a*) journal entries to record the above in the books of the firm, and (*b*) the initial Balance Sheet of the new firm.

(*Adapted from Delhi SSCE, 1984*)

(*Ans.* The entire amount of Goodwill brought in by Sailesh (Rs. 1,000) will go to Mukesh. Balance Sheet Total Rs. 17,000).

8. A and B are partners sharing profits and losses as 2 : 1. C and D are admitted and profit sharing ratio becomes 4 : 3 : 2 : 1. Goodwill is valued at Rs. 20,000. D brings required goodwill and Rs. 5,000 cash for capital. C brings in Rs. 5,000 cash and Rs. 6,000 worth of stock as his capital in addition to the required amount of goodwill in cash.

Show the necessary journal entries. (*All India SSCE, 1986*)

(*Ans.* A and B will get Goodwill in the ratio of sacrifice, *i.e.*, 8 : 1).

9. A and B are partners sharing profits and losses as 2 : 1. On 1st April 1987, they admit C as a partner for 1/4th share who pays Rs. 4,500 as goodwill privately. On 1st April 1988 they take D as a partner for 1/5th share who brings Rs. 4,000 as goodwill out of which half is withdrawn by the existing partners. On 1st April, 1989, E is admitted as a partner for 1/6th share who brings Rs. 5,000 as goodwill which is retained in the business.

Journalise the above transactions in the books of the firm, assuming that Goodwill Account is not raised and calculate profit sharing ratio after every admission. (*Adapted from All India SSCE, 1986*)

(*Ans.* A, B and C— 2 : 1 : 1 ; A, B, C and D— 2 : 1 : 1: 1; A, B, C, D and E—2 : 1 : 1 : 1 : 1).

10. A and B carried on business in partnership since 1985 sharing profits and losses in the ratio of 2 : 1 respectively. They admitted C on 1st April, 1989, for 2/7th share. The actual value of goodwill, however, on that date was Rs. 21,000. C contributed the following assets towards payment of his capital and goodwill :

Cash Rs. 6,000 ; Sundry Debtors ; Rs. 5,000 ; Stock Rs. 6,000.

Pass the necessary journal entries to give effect to the above. Also give the new profit-sharing ratio. (*Adapted from Delhi SSCE, 1980*)

(*Ans*. Credit A and B with Rs. 4,000 and Rs. 2,000 on account of Goodwill. New profit sharing ratio 10 : 5 : 6).

11. A commenced business with a capital of Rs. 1,50,000 on April 1, 1984. During the five years ending March 31, 1989, the following profits and losses were made :

Year ending on		*Loss or Profit*	Rs.
March 31,	1985	Loss	10,000
,,	1986	Profit	34,000
,,	1987	Profit	36,000
,,	1988	Profit	30,000
,,	1989	Profit	40,000

During the period he had withdrawn Rs. 20,000 per annum for his personal use.

B is to be admitted as a partner. He is to bring for his one-half share in the business, proportionate capital based on A's capital as on 31st March, 1989, and to pay for one-half share of goodwill of the business on the basis of three times the average profits of the last five years.

Prepare a statement showing what amount B should invest to become a partner. (*Adapted from All India SSCE, 1980*)

(*Ans*. B will bring in Rs. 2,06,000 as Capital and Rs. 26,000 as Goodwill).

12. A and B are partners sharing profits in the ratio of 3 : 2. They admit C into the firm for 3/7ths share of profit of which he takes 2/7th from A and 1/7th from B and brings Rs. 1,000 as premium out of his share of Rs. 1,800. Goodwill account does not appear in the books of A and B but the new firm decides that goodwill should appear in the books of the new firm at a value of Rs. 1,600. (*All India SSCE, 1979*)

Journalise the above transactions.

[*Ans*. Credit A and B with Rs. 666·67 and Rs. 333·33 (in the ratio of sacrifice) on account of Goodwill brought in cash. Raise Goodwill Account at Rs. 1,866·66 and credit A and B in the ratio of 3 : 2 (Old profit sharing ratio of 3 : 2). Write off Rs. 266·66 to Capital Accounts of A, B and C (in the new profit sharing ratio of 11 : 9 : 15)].

13. Sita Ram and Jai Ram carrying on business in partnership and sharing profits and losses in the ratio of 3 : 2 require a partner, when their Balance Sheet stood as follows :

Liabilities	Amount	*Assets*	Amount
	Rs.		Rs.
Creditors	11,800	Cash	1,500
Sita Ram's Capital	51,450	Stock	28,000
Jai Ram's Capital	36,750	Debtors	19,500
		Furniture	2,500
		Machinery	48,500
	1,00,000		1,00,000

They admit Paras Ram into partnership and give him 1/8th share in future profits on the following terms :

(*a*) Goodwill of the entire firm to be valued at twice the average of the last three years' profits which amounted to Rs. 21,000, Rs. 24,000 and Rs. 25,560.

(*b*) Paras Ram to bring his share of goodwill in cash.

(*c*) He is to bring in cash Rs. 15,000 as his capital.

Give the Journal Entries recording these transactions, and draw out the Balance Sheet of the new firm and state the future profit sharing ratio.

(*Ans*. Loss on Revaluation Rs. 1,800. Balance Sheet Total Rs.1,20,880. New Profit Sharing Ratio 21 : 14 : 5).

14. The following is the Balance Sheet of X and Y sharing profits and losses in the ratio 2 : 1 :

Liabilities		Amount	*Assets*	Amount
		Rs.		Rs.
Sundry Creditors		10,000	Cash	6,000
Capital Accounts :			Stock	6,000
	Rs.		Sundry Debtors	30,000
X	25,000		Furniture	3,000
Y	20,000		Property	10,000
		45,000		
		55,000		55,000

They agreed to admit Z into partnership on the following conditions :

(*a*) Z to pay Rs. 4,500 as goodwill to be retained in the business and to be shared by X and Y.

(*b*) Z to bring further Rs. 5,500 as his Capital for 1/4th share of profits in the business.

(*c*) Depreciation to be calculated on the assets at the following rates : Property 2·5% ; Furniture 5% ; Stock to be reduced by Rs. 800, and a Bad Debts Reserve on Sundry Debtors to be provided for by Rs. 600.

Assuming the above terms have been given effect to, show the necessary Journal Entries and prepare the initial Balance Sheet of X, Y and Z.

(*Ans*. Balance Sheet Total Rs. 63,200).

15. A and B shares profits in the proportion of 3 : 1. Their Balance Sheet on March 31, 1989 was as follows :

Liabilities		Rs.	*Assets*	Rs.
Sundry creditors		41,500	Cash at Bank	25,500
Reserve Fund		4,000	Bills Receivable	3,000
Capital Accounts :			Debtors	16,000
A	30,000		Stock	20,000
B	16,000		Fixtures	2,000
		46,000	Land and Building	25,000
		91,500		91,500

On April 1, 1989, C was admitted into partnership on the following terms.:

(*a*) That C pays Rs. 10,000 as his capital.

(*b*) That C pays Rs. 5,000 for goodwill. Half of this sum is to be withdrawn by A and B.

(*c*) That Stock and Fixtures be reduced by 10% and 5% provision for doubtful debts be created on Sundry Debtors and Bills Receivable.

(*d*) That the value of Land and Buildings be appreciated by 20%.

(*e*) There being a claim against the firm for damages, a liability to the extent of Rs. 1,000 should be created.

(*f*) An item of Rs 650 included in sundry creditors is not likely to be claimed and hence should be written back.

Record the above transactions (journal entries) in the books of the firm assuming that the profit sharing ratio between A and B has not changed. Prepare the new Balance Sheet on the admission of C.

(*Adapted from All India SSCE, 1982*)

(*Ans*. Profit on Revaluation Rs. 1,600. Balance Sheet Total Rs. 1,05,950).

16. The following is the Balance Sheet of A and B who are equal partners in a firm :

BALANCE SHEET of A and B

Liabilities	Rs.	*Assets*	Rs.
Sundry Creditors	3,250	Cash	2,250
Reserve Fund	10,000	Sundry Debtors	5,000
A's Capital	15,000	Stock	10,000
B's Capital	15,000	Patents	6,000
		Buildings	20,000
	43,250		43,250

They agreed to admit D as one-third partner, who was to bring in Rs. 20,000 as capital and in addition to pay Rs. 5,000 for Goodwill which was retained in the business. It was further agreed that (*a*) an allowance of 5 p.c. from Sundry Debtors should be made for a Bad Debt ; (*b*) Stock should be taken at a discount of 10 p.c., Patents at a discount of 25 p.c., and Buildings at a value of Rs. 22,500. (*c*) Sundry creditors include a creditor for Rs. 250 who had allowed this amount as discount but it was omitted to be recorded.

Give necessary adjustment entries and prepare Balance Sheet on admission of C.

(*Ans*. Balance Sheet Total Rs. 58,000).

17. Ram, Mohan and Sohan are equal partners with Capitals of Rs. 1,700, Rs. 1,750 and Rs. 2,000 respectively. They agreed to admit Laxman into equal partnership upon payment in cash of Rs. 1,500 for one-fourth share of Goodwill and Rs. 1,800 as his Capital, both sums to remain in the business. The liabilities of the old firm amount to Rs. 3,100 and the assets, apart from cash, consist of Motors Rs. 1,200, Furniture Rs. 400, Stock Rs. 2,650, and Debtors Rs. 3,780.

The Motors and Furniture were revalued at Rs. 950 and Rs. 410 respectively. A Goodwill Account was also raised on Laxman's admission as a partner upon the same basis as that upon which Laxman paid for his share.

Draft Journal Entries necessary to give effect to the above arrangement, and show the Balance Sheet of the new firm.

(*Ans*. Loss on Revaluation Rs. 240. Balance Sheet Total Rs. 17,610).

18. Ram and Mohan are equal partners in a business. On 31st March, 1989 their Balance Sheet stoods as follows :

BALANCE SHEET as on 31st March, 1989

Liabilities	Amount	*Assets*	Amount
	Rs.		Rs.
Creditors	3,559	Cash	150
Bank Overdraft	4,841	Investments	3,000
Capitals :		Debtors	5,700
Ram	3,000	Stock	4,150
Mohan	2,000	Fixtures	400
	13,400		13,400

It is arranged to admit Sohan into partnership and, as a result of negotiations, it is agreed to make the following adjustments in the above Balance Sheet :

(*a*) To create a Goodwill of Rs. 2,000.
(*b*) To create a Reserve of 5% on Debtors for Doubtful Debts.
(*c*) To write down Fixtures to Rs. 300.
(*d*) To depreciate Stock by 10%.
(*e*) To increase the value of investments to Rs. 3,500.

Sohan then introduces Rs. 2,500 as his third share of the capital to which amount it has been agreed that the capitals of the other partners are to be adjusted.

Make entries necessary to give effect to the above arrangement and prepare the amended Balance Sheet immediately after Sohan has become a partner.

(*Ans*. Loss on Revaluation Rs. 300. Balance Sheet Total Rs. 15,900).

19. Ajai and Vijai are in partnership, sharing-profits in proportion of 3/5ths and 2/5ths respectively. Their Balance Sheet is as follows :

BALANCE SHEET

Liabilities		Amount	*Assets*		Amount
	Rs.	Rs.		Rs.	Rs.
Capital			Cash		650
Ajai	2,000		Debtors	1,000	
Vijai	1,000		*Less* Reserve	400	600
	——	3,000	Stock		1,500
Creditors		400	Plant		650
		3,400			3,400

They decide to admit Pardeep to 1/3rd share upon terms that he is to pay into the business Rs. 1,000 as Goodwill and sufficient Capital to give him a 1/3rd share of the total Capital of the new firm. It was agreed that the Reserve for Bad Debts be reduced to Rs. 100 ; that the Stock be revalued at Rs. 2,000 ; and that the Plant be reduced to Rs. 500.

Show the Balance Sheet of the new partnership. (*All India SSCE, 1986*)

(*Ans*. Profit on Revaluation Rs. 650. Balance Sheet Total Rs. 7,375. Pardeep's Capital Rs. 2,325).

20. Deepika and Rajshree are partners in a firm sharing profits and losses in the ratio of 3 : 2. On 31st March, 1989, their Balance Sheet was as under :

Liabilities	Rs.	*Assets*	Rs.
Sundry Creditors	16,000	Cash in Hand	1,200
Public Deposits	61,000	Cash at Bank	2,800
Bank Overdraft	6,000	Stock	32,000
Outstanding Liabilities	2,000	Prepaid Insurance	1,000
Capital Accounts :		Sundry Debtors 28,800	
Rs.		*Less* Reserve for Doubtful Debts 800	
Deepika 48,000			
Rajshree 40,000			28,000
	88,000	Plant and Machinery	48,000
		Land and Building	50,000
		Furniture	10,000
	1,73,000		1,73,000

On the above date the partners decide to admit Anshu as a partner on the following terms :

(*i*) The new profit sharing ratio of Deepika, Rajshree and Anshu will be 5 : 3 : 2 respectively.

(*ii*) Anshu shall bring Rs. 32,000 as his capital.

(*iii*) Anshu is unable to bring in any cash for his share of goodwill. Partners, therefore, decide to raise Goodwill Account in the books of the firm. They further decide to calculate goodwill on the basis of Anshu's share in the profits and the capital contribution made by him to the firm.

(*iv*) Plant and Machinery is to be valued at Rs. 60,000, Stock at Rs. 40,000 and the Reserve for Doubtful Debts is to be maintained at Rs. 4,000. Value of Land and Buildings has appreciated by 20%. Furniture has depreciated by 10%.

(*v*) There is an additional liability of Rs. 8,000 being outstanding salary payable to employees of the firm. This liability is not included in the outstanding liabilities stated in the above Balance Sheet. Partners decide to show this liability in the books of accounts of the reconstituted new firm.

Prepare Revaluation Account, Partners' Capital Accounts and the Balance Sheet of Deepika, Rajshree and Anshu. (*Adapted from All India, SSCE 1989*)

(*Ans*. Profit on Revaluation Rs. 17,800. Value of Goodwill Rs. 27,750. Balance Sheet Total Rs. 2,58,550).

21. A and B are partners in a firm sharing profits and losses in the ratio of 3 : 2. Their Balance Sheet was as follows on 1st April, 1989 :

Liabilities		Rs.	*Assets*	Rs.
Sundry Creditors		15,000	Plant	30,000
Capital Accounts :			Patents	10,000
A	Rs. 30,000		Stock	20,000
B	Rs. 25,000		Debtors	18,000
		55,000	Cash	2,000
General Reserve		10,000		
		80,000		80,000

C is admitted as a partner on the above date on the following terms :

(*i*) He will pay Rs. 10,000 as goodwill for one-fourth share in the profits of the firm.

(*ii*) The assets are to be valued as under :

Plant at Rs. 32,000 ; Stock at Rs. 18,000 ; Debtors at book figure less a provision of 5 per cent for Bad Debts.

(*iii*) It was found that the creditors included a sum of Rs. 1,400 which was not to be paid. But it was also found that there was a liability for compensation to workers amounting to Rs. 2,000.

(*iv*) C was to introduce Rs. 20,000 as capital and the capitals of the other partners were to be adjusted in the new profit sharing ratio. For this purpose, current accounts were to be opened.

Give Journal entries to record the above and Balance Sheet after C's admission. (Ledger Accounts are *not* required.)

(*Ans*. Loss on Revaluation Rs. 1,500. Current Accounts : A Rs. 5,100 (Cr.) ; B Rs. 8,400 (Cr.) ; Balance Sheet Total Rs. 1,09,100).

22. A and B sharing profits in the ratio of 5 : 3 admit C as a partner with 1/5th share in profits. He has to contribute Rs. 20,000 as his capital. The Balance Sheet of A and B before admission was as follows :

Liabilities		Rs.	*Assets*		Rs.
Sundry Creditors		21,000	Goodwill		10,000
Bills Payable		6,000	Land and Buildings		25,000
Capitals :			Plant and Machinery		30,000
A	50,000		Stock		15,000
B	35,000				
		85,000	Sundry Debtors	20,000	
			Less Reserve	1,500	
General Reserve		16,000			18,500
			Investments		20,000
			Cash		9,500
		1,28,000			1,28,000

Other terms agreed upon were :

(*i*) Goodwill of the firm was to be valued at Rs. 22,000.

(*ii*) Land and Buildings were to be valued at Rs. 35,000 and Plant and Machinery at Rs. 25,000.

(*iii*) The provision for bad debts was found to be in excess by Rs. 400.

(*iv*) A liability for Rs. 1,000 included in Sundry Creditors was not likely to arise.

(*v*) Rs. 12,000 of Investments were to be taken over by A and B in their profit sharing ratios.

(*vi*) B is to withdraw Rs. 3,400 in cash.

(*vii*) The capitals of the partners in the new firm are to be in their profit sharing ratio, the basis for this purpose being C's Capital.

Give Journal Entries to record the above transactions and show the Balance Sheet of the firm after C's admission.

(*Ans.* Profit on Revaluation Rs. 6,400. Balance Sheet Total Rs.1,26,000).

23. Arun and Binod were in partnership sharing profits and losses in the ratio of 3 : 1. On 1st April, 1989 they admit Chander as a partner on the following terms :

(1) That Chander brings initially Rs. 10,000 as his capital and Rs. 5,000 for goodwill, half of which is to be withdrawn by Arun and Binod. (2) That the value of land and building be appreciated by 15 per cent and that of stocks and machinery and fixtures be reduced by 7 and 5 per cent respectively. (3) That provision for doubtful debts be made at 5 per cent. (4) That Rs. 1,500 and Rs. 190 be provided for an unforeseen liability and outstanding rates. (5) That Chander be given one-fifth share in profit and that profit-sharing ratio between Arun and Binod should remain the same. (6) That the total capital of the firm including that of initial capital brought in by Chander should be apportioned between the partners in the new profit sharing ratio and the necessary adjustment be done through cash.

The Balance Sheet of the old partnership on 31st March, 1989 stood as fallows :

Liabilities		Rs.	*Assets*	Rs.
Sundry creditors		35,000	Cash in hand	4,000
Profit & Loss A/c		8,000	Book debts	20,000
Capital Accounts :			Stocks	18,000
Arun	34,000		Machinery and fixture	20,000
Binod	18,000		Land and building	33,000
		52,000		
		95,000		95,000

Give necessary Journal Entries, Ledger Accounts and the Balance Sheet of the newly constituted firm.

(*Ans.* Adjusted Capitals of Arun, Binod and Chander Rs. 43,500, Rs. 14,500 and Rs. 14,500 respectively. Balance Sheet Total Rs. 1,09,190).

24. The Balance Sheet of Bhogi and Regi, who are partners, as on 31st March, 1989 was as follows :

Liabilities	Rs.	Assets	Rs.
Capitals :		Fixed assets :	
Bhogi	12,000	Goodwill	12,000
Regi	24,000	Land and building	14,400
Current accounts :		Furniture	1,200
Bhogi	14,400	Current assets :	
Regi	9,600	Stock in trade	25,200
Sundry creditors	6,000	Sundry debtors	4,200
Bank overdraft	3,000	Negi : Loan account	12,000
	69,000		69,000

Bhogi and Regi were sharing profits and losses as 1 : 2. They agreed to admit Negi (who was also in business on his own account) as a third partner from 1st April, 1989.

The assets were revalued as under : Goodwill Rs. 18,000 ; Land and building Rs. 30,000 ; Furniture Rs. 6,000.

Negi brought the following assets into partnership : Goodwill for his connections Rs. 6,000 ; Furniture Rs. 1,800 ; Stock-in-trade Rs. 13,800. Negi's Loan was agreed to be converted into his Current Account.

Profits in the new firm were to be shared equally by the three partners and the capital accounts were to be so adjusted as to be equal, and any excess or shortage was to be transferred to Current Accounts.

Prepare the Capital and Current Accounts of the three partners and the opening Balance Sheet of the new firm.

(*Ans*. Capitals : Rs. 21,600 each partner. Current Accounts : Bhogi (Cr.) Rs. 13,600 ; Regi (Cr.) Rs. 29,600 ; Negi (Dr.) Rs. 12,000. Balance Sheet Total Rs. 1,17,000).

25. The following is the Balance Sheet of Abhoy and Benoy as on 1st April, 1987 :

Liabilities	Rs.	Assets	Rs.
Sundry creditors	10,500	Cash in Hand	500
Bank overdraft	7,000	Investments	4,000
Reserve fund	5,000	Book debts	12,000
Abhoy—capital	25,000	Stock	10,000
Benoy—capital	10,000	Furniture	6,000
		Machinery	25,000
	57,500		57,500

They made a profit of Rs. 16,100 during the year ended 31st March, 1988 before charging interest on capital at 16 per cent, profit being divisible to Abhoy 7/10 and Benoy 3/10. On 1st April 1988 it is decided to admit Chinmoy into partnership upon the conditions that he pays Rs. 4,000 for a fifth share of goodwill (which he acquires in equal proportions from the existing partners) and contributes Rs. 12,000 as his share of capital. The existing partners are to make up or withdraw the required amount in cash to maintain their capital in proportion to their new profit-sharing ratio. During

the year ended 31st March, 1989 the profit before charging interest on capital amounted to Rs. 10,000.

Your are required to show the Capital Account of each partner.

(*Ans.* On 1st April, 1988, Abhoy and Benoy withdraw Rs. 5,850 and Rs. 6,250 respectively. Capital balances on 31st March, 1989 : Abhoy Rs. 47,760, Benoy Rs. 15,920, Chinmoy Rs. 15,920).

26. A and B have been carrying on business in partnership since 1st April, 1986 with Capitals of Rs. 30,000 and Rs. 10,000 respectively and sharing profits in the same proportions. The Net Profits for the years ended 31st March, 1987, 1988 and 1989 were Rs. 25,000, Rs. 30,000 and Rs. 35,000 respectively. It is agreed that from 1st April, 1989 B is to have 2/5ths share in the future profits and for that purpose he should pay Goodwill for the further proportion of profits, such Goodwill to be valued on the basis of two years' purchase calculated on the average of the past three years' profits. The Capital Accounts of the partners are to be adjusted in accordance with the new profit-sharing arrangements, allowing partner having surplus capital to withdraw and asking partner having short capital to bring cash.

Pass Journal entries to record the above arrangement, assuming that B has brought in the necessary sum. Show also the Capital Accounts of the partners.

(*Ans.* Debit B and credit A with Rs. 9,000 on account of Goodwill. A withdraws Rs. 28,500 and B brings Rs. 28,500).

27. A, B and C shared profits and losses equally. Their Balance Sheet as on 31st March, 1989 was as under :

Capital and Liabilities	Rs.	*Assets*	Rs.
A's Capital	70,560	Machinery	10,080
B's Capital	52,920	Buildings	81,900
C's Capital	25,200	Debtors	45,360
Creditors	25,200	Stock	47,880
Bills Payable	13,860	Bank Balance	2,520
	1,87,740		1,87,740

On 1st April, 1989 D was taken as a partner with 1/4th share in the profits on the following terms and conditions :

1. Stock and Machinery should be taken as overvalued by 10% and should therefore be reduced accordingly.
2. D should bring Rs. 37,800 as goodwill and Rs. 63,000 as his capital.
3. Half of the goodwill amount only shall be retained in the business.
4. Value of building should be raised to Rs. 1,13,964.
5. 5% on debtors be provided as bad debts reserve.
6. Values of assets and liabilities are not to be altered (except bank balance).

Prepare the Memorandum Revaluation Account, Capital Accounts of Partners, Bank Account and Balance Sheet of the new firm.

(*Ans.* Bank Balance Rs. 84,420. Capitals of A, B, C and D Rs. 78,860, Rs. 61,220, Rs. 33,500 and Rs. 57,000 respectively. Balance Sheet Total Rs. 2,69,640).

28. On 1st April, 1988, Abraham and Bhagwanji who were in partnership sharing profit in the ratio of 7/12 and 5/12 respectively, take in Cooverji giving him 1/6th share. Abraham and Bhagwanji were to share future profits in the ratio of 13/24 and 7/24.

Over and above his capital, Cooverji brings in Rs. 96,000 as his goodwill for the 1/6th share. The cash brought in by Cooverji as his capital and his goodwill is credited to one separate account in his personal name. On 31st March, 1989, the Trial Balance of the firm stood as follows:

	Rs.		Rs.
Machinery	6,00,000	Abraham's capital	3,36,000
Furniture	40,000	Bhagwanji's capital	2,40,000
Stock	1,20,000	Cooverji's personal A/c	2,24,000
Debtors	2,00,000	Creditors	16,000
Abraham's drawings	32,000	Current year's profit	2,64,000
Bhagwanji's drawings	52,000		
Cooverji's drawings	8,000		
Cash in hand	28,000		
	10,80,000		10,80,000

Interest on drawings is to be ignored but interest on capital is to be charged at 15% p.a. after necessary adjustments on admission. Prepare new Balance Sheet.

(*Ans.* Capitals—Abraham Rs. 4,60,000, Bhagwanji Rs 3,48,800, Cooverji Rs. 1,63,200. Balance Sheet Total Rs. 9,88,000).

Partnership Accounts — Change in Constitution of Firm : Retirement/Death of a Partner

RETIREMENT OF A PARTNER

A partner may retire from a firm—

(*i*) with the *consent* of all the other partners of the firm (and such consent may be expressed or implied),

(*ii*) in accordance with an express *agreement* by the partners, or

(*iii*) where the partnership is at will, by giving *notice* in writing to all the other partners of his intention to retire.

On the retirement of a partner from the firm, the following points usually arise :

1. Calculation of total amount payable to the retiring partner. The amount payable to him includes :

(*a*) Capital on the date of the last Balance Sheet.

(*b*) Interest and salary, if any, payable to him, to the date of retirement.

(*c*) Share of profit or loss to the date of retirement.

(*d*) Share in the profit or loss on the revaluation of assets and liabilities.

(*e*) Share in the goodwill of the firm.

(*f*) Share in the reserve fund and undistributed profit or loss appearing in the Balance Sheet.

2. Settlement of the retiring partner's account, by payment —

(*a*) in lump sum, or

(*b*) in instalments, interest being allowed on the diminishing balance of the amount due.

3. Calculation of new profit sharing ratio.

4. Adjustment of capitals of the continuing partners.

Of the above points, the following points need a special mention.

REVALUATION OF ASSETS AND LIABILITIES

The retiring partner has a right to get a share in the profit arising on the revaluation of assets and liabilities. If there is a loss on such revaluation, he must bear his share of loss. In order to ascertain profit or loss on revaluation of assets and liabilities, Revaluation Account is prepared in

exactly the same manner as in case of admission of a new partner. Any profit or loss shown by this Account is transferred to the Capital Accounts of all the partners in their profit sharing ratio. The assets and liabilities will now appear in the new Balance Sheet (prepared after the retirement of a partner) at the revised or adjusted values.

When the revised or adjusted values are not to be shown in the new Balance Sheet

In this case Memorandum Revaluation Account is prepared in Two Parts.

The profit or loss shown by Part One is transferred to the Capital Accounts of all the partners in their profit sharing ratio.

In Part Two, all the entries appearing in Part One are reversed so that if the first part shows a profit the second Part will show a loss which is transferred to the Capital Accounts of the *continuing partners* in their *new profit sharing ratio.* A specimen Memorandum Revaluation Account is prepared below :

MEMORANDUM REVALUATION ACCOUNT

Dr. PART ONE Cr.

Dr.	Cr.
To Furniture	By Building
To Stock	By Prepaid Expense
To Reserve for Doubtful Debts	
To Profit transferred to Capital Accounts :	
A, B, C (old profit sharing ratio)	

PART TWO

Dr.	Cr.
To Building	By Furniture
To Prepaid Expense	By Stock
(The entries in part one are reversed)	By Reserve for Doubtful Debts
	(The entries in part one are reversed)
	By Loss transferred to Capital Accounts :
	A, B (new profit sharing ratio)

When Memorandum Revaluation Account is prepared, assets (excepting cash) and liabilities appear in the new Balance Sheet of the continuing partners at *old values*.

GOODWILL

The value of goodwill at the time of the retirement of a partner is calculated as per the terms of the agreement amongst the partners. This has already been explained in connection with admission of a partner.

When the value of goodwill is ascertained, it can be dealt with in books of account in any one of the following ways :

1. Goodwill may be raised in books of account at its *full value*, and allowed to stand in the books. In this case Goodwill Account is debited with the amount of goodwill and the Capital Accounts of all the partners (including outgoing partner) are credited in their profit sharing ratio.

2. In the above case, goodwill may be *wiped off* by writing it back to the Capital Accounts of the continuing partners. In such a case, the Capital Accounts of the continuing partners are debited in their new profit sharing ratio and Goodwill Account is credited.

The net effect of the above two entries is that the Capital Accounts of the continuing partners stand debited in the *ratio of gain*.

Illustration 1. A, B and C are partners sharing profits and losses in the ratio of 4 : 3 : 2. B retires and the new profit sharing ratio between A and C is agreed to be 5 : 4. Goodwill is raised at full value of Rs. 36,000. After B's retirement A and C decide to write off Goodwill Account.

Pass Journal entries.

Solution :

JOURNAL

			Rs.	Rs.
	Goodwill A/c. Dr.		36,000	
	To A's Capital A/c			16,000
	To B's Capital A/c			12,000
	To C's Capital A/c			8,000
	(Being entry to raise goodwill at full value on B's retirement — credited to partners in profit sharing ratio of 4 : 3 : 2)			
	A's Capital A/c Dr.		20,000	
	C's Capital A/c Dr.		16,000	
	To Goodwill A/c			36,000
	(Being entry to write back goodwill to Capital A/cs of A and C in their new profit sharing ratio)			

The net effect of the above two entries is as follows :

A loses Rs. 20,00 – Rs. 16,000 = Rs. 4,000

B gains Rs. 12,000

C loses Rs. 16,000 – Rs, 8,000 = Rs. 8,000.

Thus A and C lose Rs. 4,000 and Rs. 8,000 respectively which is in the ratio of 1 : 2, *i,e.*, their ratio of gain.

Ratio of gain is worked out as follows :

$$\text{A gains} = \frac{5}{9} - \frac{4}{9} = \frac{1}{9}$$

$$\text{C gains} = \frac{4}{9} - \frac{2}{9} = \frac{2}{9}$$

i.e., in the ratio of $\frac{1}{9} : \frac{2}{9}$ or 1 : 2.

Ratio of gain. When a partner retires, his share of profit is taken over by the continuing partners for which they have to compensate the retiring partner in the form of goodwill. For example, let us say there are three partners A, B and C sharing profits and losses in the ratio of 4 : 2 : 1 respectively. B retires and his share is taken over by A and C equally. In such a case the new profit sharing ratio between A and C will be as follows:

$$\text{A's share} = \frac{4}{7} + \left(\frac{1}{2} \text{ of } \frac{2}{7}\right) = \frac{4}{7} + \frac{1}{7} = \frac{5}{7}$$

$$\text{C's share} = \frac{1}{7} + \left(\frac{1}{2} \text{ of } \frac{2}{7}\right) = \frac{1}{7} + \frac{1}{7} = \frac{2}{7}$$

$$\text{Thus A gains} = \frac{5}{7} - \frac{4}{7} = \frac{1}{7}$$

$$\text{C gains} = \frac{2}{7} - \frac{1}{7} = \frac{1}{7}$$

A and C gain in equal ratio or their gaining ratio is 1 : 1. Thus whatever amount is paid to B on account of his share of goodwill, A and C will have to bear it equally, *i.e.*, in the ratio of gain.

3. Goodwill may be raised in books of account at a *value equivalent to the retiring partner's share*, and may be allowed to stand in the books of account. In this case Goodwill Account is debited and the retiring partner's Capital Account is credited with his share of goodwill.

4. In case (3), goodwill may be *written back* to the Capital Accounts of the continuing partners. In such a case, the continuing partners' Capital Accounts are debited in their *ratio of gain* and Goodwill Account is credited with the amount of goodwil equivalent to retiring partner's share.

5. Goodwill may be given effect to without raising Goodwill Account in the books of account. In such a case, retiring partner's Capital Account is credited with his share of goodwill and the continuing partners' Capital Accounts are debited in the ratio of gain.

Illustration 2. A, B and C are partners in a business sharing profits and losses in the ratio of 3 : 2 : 1. B retires from the firm and A and C decide continue the business of the firm and share profits and losses in the ratio 1 : 1. Goodwill of the firm is valued at Rs. 6,000.

What will be the entries in the books of the firm—

(1) if goodwill is raised at full value and is allowed to stand in the books of the firm ;

(2) if goodwill is raised at full value but is written back to the Capital Accounts of the continuing partners ;

(3) if goodwill is raised equivalent to the retiring partner's share and is allowed to stand in the books of the firm ;

(4) if goodwill is raised equivalent to the retiring partner's share but is written back to the Capital Accounts of the continuing partners ;

(5) if no Goodwill Account is to be raised but effect is to be given to the goodwill.

Solution :

Case (1)

		Rs.	Rs.
Goodwill A/c	Dr.	6,000	
To A's Capital A/c			3,000
To B's Capital A/c			2,000
To C's Capital A/c			1,000
(Being goodwill credited to partners' Capital A/cs in the profit sharing ratio of 3 : 2 : 1 on C's retirement)			

Goodwill, in this case, will appear on the assets side of the Balance Sheet at Rs. 6,000.

Case (2)

		Rs.	Rs.
Goodwill A/c	Dr.	6,000	
To A's Capital A/c			3,000
To B's Capital A/c			2,000
To C's Capital A/c			1,000
(Being goodwill credited to partner's Capital A/cs in the profit sharing ratio of 3 : 2 : 1 on C's retirement)			

		Rs.	Rs.
A's Capital A/c	Dr.	4,800	
C's Capital A/c	Dr.	1,200	
To Goodwill A/c			6,000
(Being goodwill written back to the Capital A/cs of A and C, continuing partners, in the new profit sharing ratio of 4 : 1)			

Case (3)

		Rs.	Rs.
Goodwill A/c	Dr.	2,000	
To B's Capital A/c			2,000
(Being C's share of goodwill credited to his Capital A/c on his retirement)			

Goodwill, in this case, will appear on the assets side of the Balance Sheet at Rs. 2,000.

Case (4)

		Rs.	Rs.
Goodwill A/c	Dr.	2,000	
To B's Capital A/c			2,000
(Being B's share of goodwil credited to his Capital A/c on his retirement)			
A's Capital A/c	Dr.	1,800	
C's Capital A/c	Dr.	200	
To Goodwill A/c			2,000
(Being Goodwill written back to the Capital A/cs of A and C in the ratio of gain which is 9 : 1)			

Case (5)

		Rs.	Rs.
A's Capital A/c	Dr.	1,800	
C's Capital A/c	Dr.	200	
To B's Capital A/c			2,000
(Being the entry to adjust the share of B's goodwill to the Capitals of A and C in the ratio of gain which is 9 : 1)			

Note : It may be observed that the net effect of methods (1) and (2), (3) and (4), and (5) on the Capital Accounts of the partners is the same as shown below :

Methods (1) and (2)

Dr. CAPITAL ACCOUNTS Cr.

	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Goodwill	4,800	—	1,200	By Goodwill	3,000	2,000	1,000
Net effect	1,800	—	200	Net effect	—	2,000	—

Methods (3) and (4)

Dr. CAPITAL ACCOUNTS Cr.

	A	B	C		A	B	C
To Goodwill	1,800	—	200	By Goodwill	—	2,000	—
Net effect	1,800	—	200	Net effect	—	2,000	—

Method (5)

Dr. CAPITAL ACCOUNTS Cr.

	A	B	C		A	B	C
To C's Capital	1,800	—	200	By A's Capital By B's Capital	— —	1,800 200	— —
Net effect	1,800	—	200	Net effect	—	2,000	—

Illustration 3. A, B and C are partners sharing profits and losses in the ratio of 5 : 3 : 2. B retires and the goodwill of the firm is valued at Rs. 30,000. No goodwill appears in the books of the firm. A and C decide to

share profits and losses in future in the ratio of 13 : 7 and that no Goodwill Account is to be raised in the books of the firm.

Pass Journal entry.

Solution :

JOURNAL

			Rs.	Rs.
	A's Capital A/c Dr.		4,500	
	C's Capital A/c Dr.		4,500	
	To B's Capital A/c			9,000
	(Being the entry to adjust B's share of goodwill in the Capital Accounts of A and C in the ratio of gain)			

Ratio of gain is calculated as follows :

$$\text{A gains} = \frac{13}{20} - \frac{5}{10} = \frac{13-10}{20} = \frac{2}{30}$$

$$\text{C gains} = \frac{7}{20} - \frac{2}{10} = \frac{7-4}{20} = \frac{3}{20}$$

Thus A and C gain in the ratio of $\frac{3}{20} : \frac{3}{20}$ or in equal ratio.

RETIRING PARTNER'S SHARE IN THE RESERVE FUND

Reserve Fund represents undistributed profit accumulated over years, and a retiring partner has a share in it. His share is calculated according to his profit sharing ratio and credited to his Capital Account. The Journal entry is as follows :

Reserve Fund A/c Dr.
To Retiring Partner's Capital A/c
(Being retiring partner's share credited to his Capital A/c)

Reserve Fund Account may also be closed by transfer to the Capital Accounts of all the partners in the profit sharing ratio.

Likewise, if there is any undistributed profit appearing in the Balance Sheet, retiring partner's share is transferred to his Capital Account.

NEW PROFIT SHARING RATIO

The calculation of the new profit-sharing ratio of the continuing partners is very easy. The share of the retiring partner is very often divided among the continuing partners in their profit sharing ratio. Suppose A, B and C share profits in the ratio of 3 : 2 : 1. If B retires, the profit sharing ratio between A and C shall continue to be 3 : 1, unless the partners agree otherwise. If, for example, A and C decide to divide the share of B equally, the new profit sharing ratio between A and C will be as follows :

$$A = \frac{3}{6} + \left(\frac{1}{2} \text{ of } \frac{2}{6}\right) = \frac{1}{2} + \frac{1}{6} = \frac{2}{3}$$

$$C = \frac{1}{6} + \left(\frac{1}{2} \text{ of } \frac{2}{6}\right) = \frac{1}{6} + \frac{1}{6} = \frac{1}{3}.$$

Note also the following Illustration.

Illustration 4. A, B and C are partners sharing profits and losses as $\frac{1}{2}$ to A, $\frac{1}{3}$ to B and $\frac{1}{6}$ to C. B retires selling his share of profit to A and C for Rs. 8,000, Rs. 5,000 being paid by A and Rs. 3,000 by C. The profit for the year after B's retirement is Rs. 12,000.

Pass Journal Entries to (*a*) record the sale of B's share to A and C, and (*b*) distribute the profit between A and C.

Solution :

A and C pay Rs. 8,000 to B in the ratio of 5 : 3. They will, therefore, divide B's share between themselves in the ratio of 5 : 3. As such :

$$\text{A's share} = \frac{1}{2} + \left(\frac{5}{8} \text{ of } \frac{1}{3}\right) = \frac{1}{2} + \frac{5}{24} = \frac{17}{24}$$

$$\text{C's share} = \frac{1}{6} + \left(\frac{3}{8} \text{ of } \frac{1}{3}\right) = \frac{1}{6} + \frac{1}{8} = \frac{7}{24}.$$

JOURNAL

(*a*) *For recording sale of B's share to A and C.*

			Rs.	Rs.
	A's Capital A/c Dr.		5,000	
	C's Capital A/c Dr.		3,000	
	To B's Capital A/c			8,000
	(Being entry for recording sale of B's share to A and C for Rs. 5,000 and 3,000 respectively)			

(*b*) *For distribution of profit between A and C.*

			Rs.	Rs.
	Profit and Loss A/c Dr.		12,000	
	To A's Capital A/c			8,500
	To C's Capital A/c			3,500
	(Being entry for transfer to profit of A and C in the ratio of 17 : 7)			

Illustration 5. Ram, Krishan and Shyam are partners sharing profits and losses in the ratio of 5 : 3 : 2. On 31st March, 1989 their Balance Sheet was as under :

Sundry Creditors	18,000	Freehold Premises	8,000
Reserve Fund	6,000	Machinery	4,500
Capitals :		Stock	7,250
Ram	5,000	Sundry Debtors	8,000
Krishan	6,000	Bank	250
Shyam	2,000	Goodwill	9,000
	37,000		37,000

It is agreed that Ram shall retire as from 31st March, 1989 on the following terms :

(*a*) The Goodwill of the firm is agreed to be valued at three times the average annual profits of the five years immediately preceding, which are Rs. 15,000 ; Rs. 4,000 ; Rs. 6,000 ; Rs. 8,000 ; Rs. 7,000.

Goodwill is to be raised to full value and is to be allowed to stand in books of account.

(*b*) Stock is agreed to be worth Rs. 6,750.

(*c*) Freehold premises are to be revalued at Rs. 12,000 and Machinery at Rs. 3,200.

(*d*) An unclaimed liability of Rs. 200 is to be written off.

(*e*) A Reserve for Doubtful Debts at 5 per cent on Sundry Debtors is to be created.

(*f*) Ram is to be paid out as to Rs. 10,000 of the amount found to be due to him by a mortgage on the Freehold Premises, and as to the balance by a bill of exchange (without interest) at 12 months.

(*g*) The capital of the firm as newly constituted is to be fixed at Rs. 20,000 between Krishan and Shyam in the profit sharing ratio (*i.e.*, actual cash to be paid off to or to be brought in by the continuing partners, as the case may be).

Set out Journal Entries giving effect to the above, prepare Profit and Loss Adjustment Account, Capital Accounts of partners, and the Balance Sheet of Krishan and Shyam on 31st March, 1989 after the above adjustments have been made.

Solution :

Calculation of Goodwill :

Average of 5 years' profits

$$= \frac{\text{Rs. } 15{,}000+4{,}000+6{,}000+8{,}000+7{,}000}{5}$$

$$= \text{Rs. } \frac{40{,}000}{5} = \text{Rs. } 8{,}000$$

New value of Goodwill = Rs. 8,000 × 3= Rs. 24,000

Increase in the value of Goodwill = Rs. 24,000 – Rs. 9,000 = Rs. 15,000.

JOURNAL

1989			Rs.	Rs.
Mar. 31	Goodwill A/c Dr.		15,000	
	To Ram's Capital A/c			7,500
	To Krishan's Capital A/c			4,500
	To Shyam's Capital A/c			3,000
	(Being the entry for increase in the value of goodwill on Ram's retirement—credited to partners in the ratio of 5 : 3 : 2)			

Date	Particulars		L.F.	Rs.	Rs.
1989					
Mar. 31	Reserve Fund A/c	Dr.		6,000	
	To Ram's Capital A/c				3,000
	To Krishan's Capital A/c				1,800
	To Shyam Capital A/c				1,200
	(Being transfer of Reserve Fund to Capital A/cs of partners in the ratio of 5 : 3 : 2)				
	Profit and Loss Adjustment A/c	Dr.		2,200	
	To Stock A/c				500
	To Machinery A/c				1,300
	To Reserve for Doubtul Debts A/c				400
	(Being reduction in the value of assets)				
	Freehold Premises A/c	Dr.		4,000	
	Sundry Creditors	Dr.		200	
	To Profit and Loss Adjustment A/c				4,200
	(Being increase in the value of Freehold Premises and reduction in liability)				
	Profit and Loss Adjustment A/c	Dr.		2,000	
	To Ram's Capital A/c				1,000
	To Krishan's Capital A/c				600
	To Syam's Capital A/c				400
	(Being transfer of Profit on revalution of assets and liabilities to partners' Capital A/cs)				
	Ram's Capital A/c	Dr.		16,500	
	To Mortgage on Freehold Premises A/c				10,000
	To Bills Payable A/c				6,500
	(Being settlement of Ram's Capital by creating a mortgage on Freehold Premises and by accepting a bill at 12 months)				
	Bank A/c	Dr.		1,400	
	To Shyam's Capital A/c				1,400
	(Being amount brought in by Shyam to make his Capital 2/5th of Rs. 20,000)				
	Krishan's Capital A/c	Dr.		900	
	To Bank				900
	(Being amount withdrawn by Krishan to bring down the balance of his Capital to 3/5th of Rs. 20,000)				

LEDGER

PROFIT AND LOSS ADJUSTMENT ACCOUNT

Dr					Cr.
1989		Rs.	1989		Rs.
Mar. 31	To Stock	500	Mar. 31	By Freehold Premises	4,000
	To Machinery	1,300		By Sundry Creditors	200
	To Reserve for Doubtful Debts	400			
	To Profit to : Ram 1,000; Krishan 600; Shyam 400	2,000			
		4,200			4,200

RAM'S CAPITAL ACCOUNT

Dr.					Cr.
1989		Rs.	1988		Rs.
Mar. 31	To Mortgage on Freehold Premises	10,500	April 1	By Balance b/d	5,000
	To Bills Payable	6,000	1989 Mar. 31	By Goodwill	7,500
				By Reserve Fund	3,000
				By P & L Adj. A/c	1,000
		16,500			16,500

KRISHAN'S CAPITAL ACCOUNT

Dr.					Cr.
1989		Rs.	1988		Rs.
Mar. 31	To Bank	900	Apr. 1	By Balance b/d	6,000
	To Balance c/d	12,000	1989 Mar. 31	By Goodwill	4,500
				By Reserve Fund	1,800
				By P & L Adj. A/c	600
		12,900			12,900
			1989 Apr. 1	By Balance b/d	12,000

SHYAM'S CAPITAL ACCOUNT

Dr.					Cr.
1989		Rs.	1988		Rs.
Mar. 31	To Balance c/d	8,000	Apr. 1	By Balance b/d	2.000
			1989 Mar. 31	By Goodwill	3,000
				By Reserve Fund	1,200
				By P & L Adj.A/c	400
		8,000			8,000
			1989 Apr. 1	By Balance b/d	8,000

BALANCE SHEET of Krishan and Shyam
as on 31 March, 1989

Liabilities		Amount	Assets		Amount
		Rs.			Rs.
Sundry Creditors		17,800	Bank		750
Bills Payable		6,500		Rs.	
Mortgage on Freehold Premises		10,000	Sundry Debtors	8,000	
			Less Reserve	400	7,600
Capitals :	Rs.		Stock		6,750
			Machinery		3,200
Krishan	12,000		Freehold Premises		12,000
Shyam	8,000	20,000	Goodwill		24,000
		54,300			54,300

SETTLEMENT OF RETIRING PARTNER'S ACCOUNT

The retiring partner's account can be settled in the following ways :

(1) *By lump sum payment.* If the payment is made in one lump sum, retiring partner's Capital Account is debited and Cash/Bank Account is credited. The journal entry is :

Retiring Partner's Capital A/c Dr.
To Cash/Bank A/c
(Being amount paid to the retiring partner)

(2) *By payment in instalments.* Very often the business is not in a position to pay the amount due to the retiring partner in one lump sum. In such a case, the balance shown by his Capital Account is transferred to his Loan Account, interest at an agreed rate being payable on the balances outstanding. The journal entries in such a case are as follows :

(*i*) *For transfer to Loan A/c :*

Retiring Partner's Capital A/c Dr.
To Retiring Partner's Loan A/c
(Being transfer of Retiring Partner's Capital A/c to his Loan A/c)

(*ii*) *For interest :*

Interest A/c Dr.
To Retiring Partner's Loan A/c
(Being amount of interest on Retiring Partner's Loan)

(*iii*) *For payment of instalment :*

Retiring Partner's Loan A/c Dr.
To Cash/Bank A/c
(Being payment of instalment)

Note : The last two entries will be repeated till the loan is fully paid off.

According to Sec. 37 of the Indian Partnership Act, 1932 where a partner dies or retires from the firm and there is no final settlement of accounts, the legal representatives of the deceased partner or the retiring

partner are/is entitled, at their discretion, either to interest @ 6% per annum on the amount of his capital or to such share of profit that is earned by the firm with the help of the amount due to him by the firm.

Illustration 6. X, Y and Z are partners in a business. On 1st April, 1985, Y retires from the firm, the total amount payable to him on account of capital and his other interests in the firm having been agreed at Rs. 16,500. The amount is payable to him as follows :

Rs. 6,500 down and the balance in 4 equal yearly instalments with interest at 16 per cent per annum on the balance oustanding.

Show Y's Capital and Loan Accounts.

Solution :

Dr. Y's CAPITAL ACCOUNT Cr.

1985		Rs.	1985		Rs.
Apr. 1	To Cash	6,500	Apr. 1	By Balance	16,500
	To Y's Loan A/c (transfer)	10,000			
		16,500			16,500

Dr. Y's LOAN ACCOUNT Cr.

1986		Rs.	1985		Rs.
Mar. 31	To Cash	4,100	Apr. 1	By Y's Capital A/c	10,000
	To Balance c/d	7,500	1986		
			Mar. 31	By Interest	1,600
		11,600			11,600
1987			1986		
Mar. 31	To Cash	3,700	Apr. 1	By Balance b/d	7,500
	To Balance c/d	5,000	1987		
			Mar. 31	By Interest	1,200
		8,700			8,700
1988			1987		
Mar. 31	To Cash	3,300	Apr. 1	By Balance b/d	5,000
	To Balance c/d	2,500	1988		
			Mar. 31	By Interest	800
		5,800			5,800
1989			1988		
Mar. 31	To Cash	2,900	Apr. 1	By Balance b/d	2,500
			1989		
			Mar. 31	By Interest	400
		2,900			2,900

DEATH OF A PARTNER

The points which arise on the death of a partner are the same as on the retirement of a partner. The following two points may, however, be noted :

1. A partner usually retires on the last date of the accounting period whereas a partner may die any time. The preparation of final accounts on date of death sometimes becomes impracticable.

2. In case of retirement of a partner, the payment is usually made to the retiring partner in instalments. For any contingency as death of a partner, a Joint Life Insurance Policy is taken. The amount of the policy becomes payable on the first death. Out of the amount received on the Joint Life Policy, the payment is made to the legal representatives of the deceased partner.

CALCULATION OF DECEASED PARTNER'S SHARE OF PROFIT

If the final accounts are prepared on the date of the death of a partner, his proportionate share of profit will be credited to his Capital Account. But very often, it is not practicable to find out the value of stock on the date of the death of the partner. Again the question of depreciation of assets, the basis of valuation of stock and such other matters will present difficulties between the surviving partners and the legal representatives of the deceased partner. Hence, the manner in which profits are to be calculated from the date of the last Balance Sheet to the date of the death of a partner is laid down in the Partnership Agreement. This may be done in either of the following two ways :

1. Compuation of profit on the basis of time

This is done in the following manner :

$$\text{Profit from the date of last Balance Sheet to the date of death} = \frac{\text{No. of days from the date of the last Balance Sheet to the date of death}}{365} \times \text{Average profit of a given number of past years}$$

The calculation may also be made in months instead of days.

This method suffers from the defect that the profit is not earned uniformly over the period. If the period from the date of the last Balance Sheet to the date of death is in-season, the deceased partner's share would be less, and if it is out-season, the deceased partner's share would be more.

2. Computation of profit on the basis of turnover (sales)

$$\text{Profit from the date of last Balance Sheet to the date of death} = \frac{\text{Turnover from the date of the last Balance Sheet to the date of death}}{\text{Average turnover of a given number of past years}} \times \text{Average profit of a given number of past years.}$$

This method is more appropriate and is preferred to first method as profit varies with turnover, and not with time.

Illustration 7. Following is the Balance Sheet of Black, Brown and White as at 1st April, 1989 :

Liabilities	Amount	Assets	Amount
	Rs.		Rs.
Sundry Creditors	2,000	Goodwill	4,000
Reserve Fund	3,200	Plant and Machinery	6,000
Capital Accounts :		Stock	4,000
Black	10,000	Sundry Debtors	6,000
Brown	5,000	Cash at Bank	5,000
White	5,000	Cash in Hand	200
	25,200		25,200

White died on 12th June, 1989. Under the terms of Partnership Deed the executors of a deceased partner were entitled to :

(*a*) Amount standing to the credit of partner's Capital Account.

(*b*) Interest on capital balance at 15% per annum.

(*c*) Share of Goodwill on the basis of twice the average of the past three years' profits, and

(*d*) Share of profit from the closing of the last financial year to the date of death on the basis of the average of the three completed years' profits before the death.

Profits for the years ended 31st March 1987, 1988 and 1989 were respectively Rs. 6,000, Rs. 7,000 and Rs. 8,000. Profits were shared in the ratio of capitals.

Pass the necessary journal entries and draw up White's Account to be rendered to his executors.

Solution :

Average of last 3 years' profits $= \dfrac{\text{Rs. } 6{,}000 + 7{,}000 + 8{,}000}{3}$

$= \dfrac{\text{Rs. } 21{,}000}{3} = \text{Rs. } 7{,}000.$

Value of Goodwill $= \text{Rs. } 7{,}000 \times 2 = \text{Rs. } 14{,}000.$

Increase in value of Goodwill $= \text{Rs. } 14{,}000 - \text{Rs. } 4{,}000$

$= \text{Rs. } 10{,}000.$

White's share of Goodwill $= \frac{1}{4}$ of Rs. 10,000 = Rs. 2,500.

No: of days from 1st April, 1989 to 12th June 1989 = 73.

Profit for this period $= \text{Rs. } \dfrac{7{,}000 \times 73}{365} = \text{Rs. } 1{,}400.$

White's share of Profit $= \frac{1}{4}$ of Rs. 1,400 = Rs. 350.

JOURNAL

			Rs.	Rs.
1989 June 12	Reserve Fund Dr. To White's Capital A/c (Being transfer to White's share of Reserve Fund to his Capital A/c)		800	800

1989 June 12	Goodwill A/c Dr.		2,500	
	To White's Capital A/c			2,500
	(Being share of White in the increase in the value of goodwill)			
	Interest on Capital A/c Dr.		150	
	To White's Capital A/c			150
	(Being interest on White's capital to the date of death)			
	Profit & Loss Appropriation A/c Dr.		350	
	To White's Capital A/c			350
	(Being White's share of profit to the date of death)			

Dr. **WHITE'S CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
June 12	To Balance c/d	8,800	Apr. 1	By Balance b/d	5,000
			June 12	By Interest	150
				By Reserve Fund	800
				By Goodwill	2,500
				By Profit & Loss Appropriation A/c	350
		8,800			8,800

Illustration 8. White's executors object to the calculation of White's share of profit to the date of death on the basis of time as adopted in the previous Illustration. They suggest that the turnover basis of calculation should be adopted. Black and Brown accept the suggestion to base calculation on the average of last three years' turnover.

Find out White's share of profit to the date of death if this suggestion is carried out. The following additional information is given :

Turnover for the years ended 31st March, 1987, 1988 and 1989 is Rs. 35,000, Rs. 40,000 and Rs. 45,000. Turnover from 1st April, 1989 to 12th June 1989 is Rs. 12,000.

Solution :

Average Turnover for the last 3 years

$$= \text{Rs. } \frac{35,000 + 40,000 + 45,000}{3}$$

$$= \text{Rs. } \frac{1,20,000}{3} = \text{Rs. } 40,000.$$

Profit to the date of death $= \text{Rs. } \frac{12,000}{40,000} \times 7,000$

$= \text{Rs. } 2,100$

White's share of profit $= \frac{1}{4}$ of Rs. 2,100 = Rs. 525.

LIFE INSURANCE POLICY

In order not to upset the working of the business when the payment is made to the legal representatives of the deceased partner, a Joint Life Policy on the life of all the partners or individual policies on the lives of all the partners is/are taken. The amount of policy becomes payable in case of Joint Life Policy, on the first death, and is available for paying off the amount due to the legal representatives of the deceased partner. In case of individual policies, the amount for which the deceased partner is insured is received. Accounting treatment of the policy premium and the amount received on death is more or less the same in both the cases.

Joint Life Policy

There are three methods of treating Joint Life Policy Premium in books of account:

1. Joint Life Policy Premium as Expense. Under this method, Joint Life Policy Premium is regarded as a business expense and is charged to Profit and Loss Account. In the event of death of one of the partners, the policy money is received and credited to the Capital Accounts of the partners (including the deceased partner) in the profit sharing ratio.

Journal Entries

(*1*) *When the policy premium is paid*:

Joint Life Policy Premium A/c Dr.

To Cash A/c

(Being payment of policy premium on the Joint Life Policy)

At the end of the year:

Profit and Loss A/c Dr.

To Joint Life Policy Premium A/c

(Being transfer of Joint Life Policy Premium to Profit and Loss A/c)

These entries are repeated year after year.

(2) *Upon the death of a partner, when the amount of policy is received*:

Cash/Bank A/c Dr.

To Joint Life Policy/Profit & Loss Adjustment A/c

(Being receipt of amount of Joint Life Policy on the death of Shri ......)

The entire amount received from the insurance company, either on the death of a partner or on the surrender of the policy, is a gain as the amount of premium had been charged to Profit and Loss Account.

(*3*) *Joint Life Policy Account or Profit and Loss Adjustment Account is closed by transfer to the Capital Accounts of the partners*:

Joint Life Policy/Profit & Loss Adjustment A/c Dr.
To Partners' (including the deceased partner) Capital A/cs
(Being transfer of the amount received on Joint Life Policy to the Capital A/cs of the partners in their profit sharing ratio)

This method suffers from the following drawbacks:

(*i*) The premium paid on Joint Life Policy is not an expense of the business. It is an investment. When the premium is debited to Profit and Loss Account it does not disclose the true amount of the profit made.

(*ii*) The Balance Sheet does not disclose the existence of an asset as represented by the surrender value of the Joint Life Policy.

2. Joint Life Policy Premium as an Investment at Full Value. Under this method, the Joint Life Policy Premiums paid are treated as an investment at full value and debited to Joint Life Policy Account which appears as an asset in the books. Upon the death of a partner, the amount received under the policy is credited to the Joint Life Policy Account, any profit (balance of Joint Life Policy Account) being transferred to the Capital Accounts of all the partners (including the deceased partner) in their profit-sharing ratio.

There are two objections to this method:

(*i*) The Joint Life Policy Account appears in the books for many years at a value greater than its surrender value or realisable value. Surrender value is the value which the insurance company would pay if the policy is surrendered to the company. It is in simple words the cash value of the policy.

(*ii*) No provision is made for the payment of the premiums out of divisible profits.

Illustration 9. A and B are in partnership, sharing profits and losses as 3/5ths and 2/5ths respectively. In order to provide money for repayment of the amount payable in the event of death of a partner they take out a joint life policy for Rs. 10,000 on 10th March, 1986. The annual premium on joint life policy is Rs. 500. B dies on 15th November, 1989 and the amount of the policy is received on 15th December, 1989.

Give journal entries in the books of the firm —

(1) if the joint life policy premium is treated as an expense, and

(2) if the premium is regarded as an investment, no provision being made for it out of the profits of the firm.

Show how joint life policy will appear in the Blanace Sheet. The accounting year ends on 31st December.

Solution :

Case (*1*)

JOURNAL

1986			Rs.	Rs.
Mar. 10	Joint Life Policy Premium A/c Dr.		500	
	To Bank			500
	(Being payment of Joint Life Policy Premium)			

			Rs.	Rs.
1986 Dec. 31	Profit & Loss A/c Dr.		500	
	To Joint Life Policy Premium A/c			500
	(Being transfer of Joint Life Policy Premium to Profit and Loss Account)			

The above two entries will be repeated for the years 1987 and 1988 also. For 1989, the entries will be as follows :

JOURNAL

			Rs.	Rs.
1989 Mar.10	Joint Life Policy Premium A/c Dr.		500	
	To Bank A/c			500
	(Being payment of Joint Life Policy Premium)			
Dec. 15	Bank A/c Dr.		10,000	
	To Joint Life Policy A/c			10,000
	(Being amount received against Joint Life Policy on B's death which occurred on 15th Nov. 1989)			
15	Joint Life Policy A/c Dr.		10,000	
	To A's Capital A/c			6,000
	To B's Capital A/c			4,000
	(Being transfer of amount received against Joint Life Policy to the Capital A/cs of A and B)			
31	Profit & Loss A/c Dr.		500	
	To Joint Life Policy Premium A/c			500
	(Being transfer of Joint Life Policy Premium to Profit and Loss A/c)			

In this case, nothing will appear in the Balnace Sheet on account of joint life policy.

Case (2)

JOURNAL

			Rs.	Rs.
1986 Mar. 10	Joint Life Policy A/c Dr.		500	
	To Bank A/c			500
	(Being payment of Premium on Joint Life Policy)			

The same entry will be passed on 10th March, 1987, 1988 and 1989.

Joint Life Policy will appear on the assets side of the Balance Sheet at Rs. 500 in 1986, at Rs. 1,000 in 1987 and at Rs. 1,500 in 1988. After the death, when the money is received, the following entries will be passed :

JOURNAL

1989			Rs.	Rs.
Dec. 15	Bank A/c Dr.		10,000	
	To Joint Life Policy A/c			10,000
	(Being receipt of amount against Joint Life Policy on B's death)			
	Joint Life Policy A/c Dr.		8,000	
	To A's Capital A/c			4,800
	To B's Capital A/c			3,200
	(Being transfer of balance on Joint Life Policy A/c to Partner's Capital A/cs)			

3. Joint Life Policy Premium as an Investment at Surrender Value. In this method Joint Life Policy is shown in the books at surrender value and a provision is made for the premiums out of the divisible profits. Surrender value is the cash value of the policy, *i.e.*, the value which the insurance company would pay if the policy is surrendered. Under this method Joint Life Policy Account is debited and Bank Account is credited when Joint Life Policy Premium is paid. At the end of the year, a sum equal to the annual premium is debited to the Profit and Loss Appropriation Account and credited to Joint Life Policy Reserve Account. A further entry is passed to adjust the Joint Life Policy Account to its surrender value by debiting Joint Life Policy Reserve Account and crediting Joint Life Policy Account with the amount of difference between Joint Life Policy premium and increase in the surrender value of the policy. Upon the death of a partner, when the sum is received, Cash/Bank Account is debited and Joint Life Policy Account is credited. The Joint Life Policy Reserve Account is closed by transfer to Joint Life Policy Account which itself is closed by transfer to the Capital Accounts of the partners (including the deceased partner) in their profit sharing ratio.

Journal Entries

(1) *At the time when premium is paid* :

Joint Life Policy A/c Dr.
To Cash/Bank A/c
(Being the payment of Joint Life Policy Premium)

At the end of the year ;

(2) *To make provision out of divisible profits for premium paid* :

Profit and Loss Appropriation A/c Dr.
To Joint Life Policy Reserve A/c
(Being the amount provided out of divisible profits for premium paid)

(3) *To reduce the Joint Life Policy Account to its surrender value* :

Joint Life Policy Reserve A/c Dr.
To Joint Life Policy A/c
(Being the adjusting entry to reduce the Joint Life Policy A/c to its surrender value)

The above three entries are repeated year after year. The amounts of the entries (1) and (2) remain the same every year. The amount of entry (3),

however, varies from year to year, and is calculated for any year as follows : Annual premium *less* increase in surrender value in that particular year.

Note : Joint Life Policy Account and Joint Life Policy Reserve Account appear correspondingly on the assets and liabilities side of the Balance sheet at surrender value.

At the time of death :

(1) *When the policy money is received :*

Cash/Bank A/c Dr.
  To Joint Life Policy A/c
(Being the receipt of Joint Life Policy money on the death of partner Shri ....)

(2) *When Joint Life Policy Reserve Account is closed by transfer to Joint Life Policy Account :*

Joint Life Policy Reserve A/c Dr.
  To Joint Life Policy A/c
(Being the transfer of Joint Life Policy Reserve A/c to Joint Life Policy A/c)

(3) *When Joint Life Policy Account is closed by transfer to the Capital Accounts of the partners :*

Joint Life Policy A/c Dr.
  To Capital A/cs of partners (including deceased partner)
(Being Joint Life Policy A/c closed by transfer to Capital A/cs of the Partners)

This method has the following advantages over the first two methods :

(1) Cash is made available for the payment of the premiums without depleting the firm's working capital as the provision is made for it out of divisible profits.

(2) The Joint Life Policy appears on the assets side of the Balance Sheet at its surrender value.

Illustration 10. A, B and C were partners, sharing profits in the proportion of one-half, one-fourth and one-fourth respectively. Their Balance Sheet on 31st March, 1989 was as follows :

Liabilities	Rs.	*Assets*	Rs.
Sundry Creditors	4,000	Cash	1,000
A's Capital	10,000	Sundry Debtors	4,500
B's Capital	6,000	Stock in Trade	5,500
C's Capital	4,000	Loan to A	3,000
		Freehold Premises	10,000
	24,000		24,000

The firm had effected an assurance for Rs. 10,000 on the joint lives of the three partners on 14th June, 1986, the annual premium being Rs. 500. The surrender value of the policy was as follows :

31st March, 1987	Nil
31st March, 1988	Rs. 400
31st March, 1989	Rs. 750

A died on 30th September, 1989, and the amount on the policy was received on 10th October, 1989.

According to the partnership agreement, Goodwill was to be calculated at two years' purchase of the average profits of the three completed years preceding the death or retirement of a partner. The deceased partner's share of profit to the date of death was to be ascertained on the basis of the average of the last three years' profits.

The amount payable to the deceased partner was paid out in cash on 10th October, the available cash balance being supplemented by a loan from the firm's banker on the security of the freehold property. The net profits of the years ended 31st March, 1987, 1988 and 1989 were Rs. 5,500, Rs. 4,800 and Rs. 6,500 respectively.

You are required to pass the journal entries relating to policy assuming that Joint Life Policy Account is maintained in the books at surrender value. Prepare Joint Life Policy Account, Joint Life Policy Reserve Account and A's Capital Account. The books are closed on March 31, each year.

Solution :

A's share of Goodwill

$$= \frac{1}{2} \text{ of } \frac{(\text{Rs. } 5{,}500 + \text{Rs. } 4{,}800 + \text{Rs. } 6{,}500) \times 2}{3}$$

$$= \frac{1}{2} \text{ of Rs. } 11{,}200 = \text{Rs. } 5{,}600.$$

A's share of profit

$$= \text{Rs. } \frac{(5{,}500 + 4{,}800 + 6{,}500) \times 6 \times 1}{3 \times 12 \times 2}$$

$$= \text{Rs. } \frac{16{,}800}{12} = \text{Rs. } 1{,}400.$$

JOURNAL

1986 June 14	Joint Life Policy A/c Dr. To Bank A/c (Being payment of premium on joint life policy)		Rs. 500	Rs. 500
1987 Mar. 31	Profit and Loss Appropriation A/c Dr. To Joint Life Policy Reserve A/c (Being the entry for making provision for payment of joint life policy premium out of divisible profits)		500	 500

				Rs.	Rs.
1987 Mar. 31	Joint Life Policy Reserve A/c Dr. To Joint Life Policy A/c (Being the entry to write off Joint Life Policy A/c against Joint Life Policy Reserve A/c as the surrender value of the policy is nil)			500	500
1987 June 14	Joint Life Policy A/c Dr. To Bank A/c (Being payment of premium on joint life policy)			500	500
1988 Mar. 31	Profit and Loss Appropriation A/c Dr. To Joint Life Policy Reserve A/c (Being the entry for making provision for payment of joint life policy premium out of divisible profits)			500	500
31	Joint Life Policy Reserve A/c Dr. To Joint Life Policy A/c (Being the adjusting entry to reduce the Joint Life Policy A/c to its surrender value which is Rs. 400)			100	100
1988 June 14	Joint Life Policy A/c Dr. To Bank A/c (Being payment of premium on joint life policy)			500	500
1989 Mar. 31	Profit and Loss Appropriation A/c Dr. To Joint Life Policy Reserve A/c (Being the entry amount provided out of divisible profits for premium paid)			500	500
31	Joint Life Policy Reserve A/c Dr. To Joint Life Policy A/c (Being the adjusting entry to reduce the Joint Life Policy A/c to its surrender value which is Rs. 750)			150	150
1989 June 14	Joint Life Policy A/c Dr. To Bank A/c (Being payment of premium on joint life policy)			500	500

			Rs.	Rs.
1989 Oct. 10	Bank A/c Dr. To Joint Life Policy A/c (Being the receipt of joint life policy money on the death of A)		10,000	10,000
	Joint Life Policy Reserve A/c Dr. To Joint Life Policy A/c (Being the transfer of Joint Life Policy Reserve A/c to Joint Life Policy A/c)		750	750
	Joint Life Policy A/c Dr. To A's Capital A/c To B's Capital A/c To C's Capital A/c (Being the transfer of Joint Life Policy A/c to partners' Capital Accounts)		9,500	 4,750 2,375 2,375

Dr. JOINT LIFE POLICY ACCOUNT Cr.

		Rs.			Rs.
1986 June 14	To Bank	500	1987 Mar. 31	By Joint Life Policy Reserve A/c	500
1987 June14	To Bank	500	1988 Mar. 31	By Joint Life Policy Reserve A/c	100
			31	By Balance c/d	400
		500			500
1988 Apr. 1	To Balance b/d	400	1989 Mar. 31	By Joint Life Policy Reserve A/c	150
June 14	To Bank	500	31	By Balance c/d	750
		900			900
1989 Apr. 1	To Balance b/d	750	1989 Oct. 10	By Bank	10,000
June 14	To Bank	500	10	By Joint Life Policy Reserve A/c (transfer)	750
Oct. 10	To A's Capital A/c	4,750			
	To B's Capital A/c	2,375			
	To C's Capital A/c	2,375			
		10,750			10,750

Dr. JOINT LIFE POLICY RESERVE ACCOUNT Cr.

		Rs.			Rs.
1987 Mar. 31	To Joint Life Policy A/c	500	1987 Mar. 31	By Profit & Loss Appropriation A/c	500

contd

Date	Particulars	Rs.	Date	Particulars	Rs.
1988			1988		
Mar. 31	To Joint Life Policy A/c	100	Mar. 31	By Profit & Loss Appropriation A/c	500
31	To Balance c/d	400			
		500			500
1989			1988		
Mar. 31	To Joint Life Policy A/c	150	Apr. 1	By Balance b/d	400
31	To Balance c/d	750	1989 Mar. 31	By Profit & Loss Appropriation A/c	500
		900			900
1989			1989		
Oct. 10	To Joint Life Policy A/c (transfer)	750	Apr. 1	By Balance b/d	750

Dr. A's CAPITAL ACCOUNT Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1989			1989		
Sep. 30	To A's Loan	3,000	Apr. 1	By Balance b/d	10,000
Oct. 10	To Bank	18,750	Sept. 30	By Goodwill	5,600
				By Profit & Loss Appropriation A/c	1,400
			Oct. 10	By Joint Life Policy A/c	4,750
		21,750			21,750

Individual Policies

The partners may, if they like, go in for separate policies on the life of each partner. Whether they take a joint life policy or separate policies, the purpose is the same, *i.e.*, money should become available after the death of a partner so that it can be paid to the legal representatives of the deceased partner.

The treatment of premium paid on separate policies is similar to the one in case of joint life policy. And the insurance company would pay on the death of a partner the amount for which the deceased partner is insured and this amount belongs to all the partners as the premium is paid by the firm. Moreover, the deceased partner will also have a share in the surrender value of the policies on the lives of surviving partners.

Illustration 11. A, B and C are partners in a business sharing profits and losses in the ratio of 3 : 2 : 1. The firm had severally insured the lives of its partners as follows : A Rs. 30,000, B Rs. 20,000 and C Rs. 13,000. The premiums paid were charged to Profit and Loss Account. B died on 31st August, 1989 when the surrender values of their policies were 25 per cent of their face vale.

Pass the necessary journal entries on the death of B.

Solution

JOURNAL

			Rs.	Rs.
1989 Aug. 15	Bank A/c Dr.		20,000	
	To Profit & Loss Adjustment A/c			20,000
	(Being the amount of B's policy received from insurance company on the death of B)			
	A's Life Policy A/c Dr.		7,500	
	C's Life Policy A/c Dr.		3,250	
	To Profit & Loss Adjustment A/c			10,750
	(Being the surrender value of the life policies of A and C taken into account on the death of B)			
	Profit & Loss Adjustment A/c Dr.		30,750	
	To A's Capital A/c			15,375
	To B's Capital A/c			10,250
	To C's Capital A/c			5,125
	(Being the amount realised on B's policy and the surrender value on the policies of A and C transferred to partners' Capital A/cs in the profit sharing ratio)			

Illustration 12. X, Y and Z carried on business in partnership, profits being divisble in the ratio of 3 : 2 : 1.

The Balance Sheet on 31st March, 1989 showed their capitals to be :

X Rs. 20,000 ; Y Rs. 15,000 ; and Z Rs. 10,000.

On 30th June, 1989, X died. You are instructed to prepare an account for presentation to his executors having regard to the following facts :

(*a*) The firm had insured the partners' lives severally, X for Rs. 10,000 ; Y for Rs. 7,500 ; and Z for Rs. 5,000. The premiums have been charged to Profit and Loss Account and the surrender value on 30th June, 1989 amounted in each case to one-half of the sum assured.

(*b*) Capital carried interest at 16% per annum.

(*c*) X's drawings from 1st April, 1989 to the date of his death amounted to Rs. 3,500.

(*d*) X's share of profits for the portion of the current financial year for which he lived was to be taken at the sum calculated on the average of the last three years' profits and goodwill was to be raised on the basis of two years' purchase of the average profit of those three years ended 31st March, 1987, 1988 and 1989.

The annual profits were Rs. 7,500 ; Rs. 8,000 and Rs. 9,000 respectively.

Show the account of the exectutor of X.

Solution :

Dr. EXECUTOR OF X Cr.

1989		Rs.	1989		Rs.
June 30	To X's Drawings	3,500	June 30	By X's Capital	20,000
	To Balance c/d	34,613		By Goodwill	8,167
				By Interest (for 3 months)	800
				By Profit (share for 3 months)	1,021
				By Profit & Loss Adjustment A/c (Half share on life policy of X and Surrender value on the policy on Y and Z)	8,125
		38,113			38,113
				By Balance b/d	34,613

Working Notes :

Goodwill. Total of profits for years ended 31st March, 1987, 1988 and 1989

= Rs. 7,500 + 8,000 + 9,000 = Rs. 24,500

Average $= \text{Rs. } \frac{24,500}{3} = \text{Rs. } 8,167$

Value of goodwill = Rs. 8,167 × 2 = Rs. 16,334

X's share $= \frac{1}{2}$ of Rs. 16,334 = Rs. 8,167

Profit. Average profit = Rs. 8,167

X's share $= \frac{1}{2} \times \frac{3}{12} \times \text{Rs. } 8,167 = \text{Rs. } 1,021$

Life Policy. Amount received on X's policy = Rs. 10,000

Add Surrender value on the policies of

Y $\frac{1}{2}$ of Rs. 7,500 = Rs. 3,750

Z $\frac{1}{2}$ of Rs. 5,000 = Rs. 2,500

Total Rs. 16,250

X's share $= \frac{1}{2}$ of Rs. 16,250 = Rs. 8,125

PURCHASE OF BUSINESS BY A PARTNER

When the business of a firm is purchased by a partner, all but that partner retire from the firm. He takes over the business either on the basis of the last Balance Sheet or subject to revaluation of assets and liabilities.

The recording of transactions on purchase of business by a partner is done in the following manner :

(1) Prepare a Profit and Loss Adjustment Account, as already explained, to adjust the values of assets and liabilities and transfer any profit

or loss made on such adjustments to the Capital Accounts of the partners in their profit sharing ratio.

(2) Ascertain the value of goodwill in accordance with the provisions of the Partnership Deed. Debit Goodwill Account (with increase in value of goodwill) and credit the partners' Capital Accounts with the same in the profit sharing ratio.

(3) Transfer any Reserve, undistributed profit or loss appearing in the Balance Sheet, to the Capital Accounts of the partners in their profit sharing ratio.

(4) Prepare an adjusted Balance Sheet of the firm, showing assets and liabilities at adjusted values and also goodwill.

(5) The assets and liabilities as adjusted would be taken over by the partner who purchases the business. These would, therefore, be transferred to his Capital Account by means of the following Journal Entries :

(*i*) Purchasing Partner's Capital A/c Dr.
To Sundry Assets A/cs
(Being assets taken over by the purchasing partner)

(*ii*) Sundry Liabilities A/cs Dr.
To Purchasing Partner's Capital A/c
(Being liabilities taken over by the purchasing partner)

(6) When the purchasing partner brings in cash to pay off the outgoing partners, Cash or Bank Account is debited and his Capital Account is credited.

(7) The outgoing partners are now paid off. The Capital Account of each outgoing partner, when the payment is made, is debited and Cash or Bank Account is credited.

Illustration 13. The Balance Sheet of A, B and C, who were sharing profits in proportion to their capitals, stood as follows on 31st March, 1989:

Liabilities		Rs.	*Assets*		Rs.
Sundry Creditors		6,900	Cash at Bank		5,500
Capital Accounts :			Sundry Debtors	5,000	
A	20,000		*Less* Reserve	100	4,900
B	15,000		Stock		8,000
C	10,000	45,000	Plant and Machinery		2,500
			Factory Land and Building		25,000
			Goodwill		6,000
		51,900			51,900

A and C retire on this date and B takes over the business. The following readjustments of the Assets and Liabilities have been agreed upon before the ascertainment of the amount payable by the firm to A and C :

(*a*) That the Stock be depreciated by 6 per cent.

(*b*) That the Reserve for Doubtful Debts be brought upto 5 per cent on debtors.

(*c*) That the Factory Land and Building be appreciated by 20 per cent.

(*d*) That a provision of Rs. 770 be made in respect of outstanding legal charges.

(*e*) That the goodwill of the entire firm be revalued at Rs. 10,500.

(*f*) That B brings in sufficient cash to pay off A and C, the balance at bank remaining intact for running the business.

Pass the necessary entries to give effect to the above arrangements and prepare the Balance Sheet of B after A and C have been paid off.

Solution :

JOURNAL

				Rs.	Rs.
1989 Mar. 31	Profit & Loss Adjustment A/c	Dr.		1,400	
	To Stock A/c				480
	To Reserve for Doubtful Debts A/c				150
	To Outstanding Legal Charges A/c				770
	(Being the entry to depreciate assets and record outstanding liability)				
	Factory Land and Building A/c	Dr.		5,000	
	To Profit & Loss Adjustment A/c				5,000
	(Being appreciation in the value of Factory Land and Building)				
	Profit & Loss Adjustment A/c	Dr.		3,600	
	To A's Capital A/c				1,600
	To B's Capital A/c				1,200
	To C's Capital A/c				800
	(Being the entry to transfer profit on revaluation of assets and liabilities)				
	Goodwill A/c	Dr.		4,500	
	To A's Capital A/c				2,000
	To B's Capital A/c				1,500
	To C's Capital A/c				1,000
	(Being the entry to record appreciation in the value of goodwill)				

Date	Particulars		L.F.	Rs.	Rs.
1989 Mar. 31	B's Capital A/c	Dr.		61,020	
	To Bank A/c				5,500
	To Debtors A/c				5,000
	To Stock A/c				7,520
	To Plant & Machinery A/c				2,500
	To Factory Land & Building A/c				30,000
	To Goodwill A/c				10,500
	(Being the entry for transfer of assets to B)				
	Sudry Creditors	Dr.		6,900	
	Outstanding Legal Expenses	Dr.		770	
	Reserve for Doubtful Debts A/c	Dr.		250	
	To B's Capital A/c				7,920
	(Being the entry for transfer of liabilities and Reserve for Doubtful Debts to B)				
	Bank A/c	Dr.		35,400	
	To B's Capital A/c				35,400
	(Being the entry for amount brought in by B to pay off A and C)				
	A's Capital A/c	Dr.		23,600	
	C's Capital A/c	Dr.		11,800	
	To Bank A/c				35,400
	(Being the entry for payment to A and C)				

BALANCE SHEET of B as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Sundry Creditors	6,900	Bank		5,500
Outstanding Legal Expenses	770			
B's Capital	53,100	Debtors	5,000	
		Less Reserve	250	4,750
		Stock		7,520
		Plant and Machinery		2,500
		Factory Land and Building		30,000
		Goodwill		10,500
	60,770			60,770

TEST QUESTIONS

1. Explain with example the procedure of determining the amount payable to a retiring partner when he leaves the firm. *(Delhi SSCE, 1985)*

2. What is Goodwill ? Discuss the different modes of treatment of goodwill on the retirement of a partner. *(All India SSCE, 1982)*

3. Why are assets and liabilities revalued on the retirement of a partner ? How would you deal with assets and liabilities not appearing in books of account on retirement of a partner ?

4. Distinguish between 'sacrificing ratio' and' gaining ratio' with the help of suitable illustrations. (*All India SSCE, 1987 ; Delhi SSCE, 1988, 81*)

5. From the following particulars, calculate the new profit sharing ratios of the partners :

(*i*) X, Y and Z were partners sharing profits in the ratio of 5 : 4 : 1. X retires from the firm.

(*ii*) A, B and C are partners in a firm sharing profit and losses in the ratio of 5 : 3 : 2. B retires from the firm and his share is taken over by A and C in the ratio of 2 : 1.

6. What is meant by Reserve and Accumulated Profit or Loss ? How are these dealt with in case of retirement of a partner ?

7. What are the various methods of dealing with Joint Life Policy Premium in the books of the firm ? What entries are made when the amount is received on the death of a partner ?

8. Enumerate the methods of treating 'Joint Life Policy' in partnership accounts. Explain clearly the method in which the joint life policy is shown in the balance sheet at its surrender value. (*Delhi SSCE, 1983*)

9. Discuss the alternative methods of recording 'Joint Life Policy' Premium in partnership books. (*All India SSCE, 1982*)

10. How will you deal with the amount of joint life policy received when a partner dies ? Assume that the firm has the practice of showing joint life policy at its surrender value. Take imaginery figures to illustrate your answer.

11. Answer briefly the following questions :

(*a*) How is the profit sharing ratio of the remaining partners determined on retirement of one partner ?

(*b*) How is the account of the retiring partner settled ?

(*c*) How is the share of profit of a deceased partner calculated ?

12. Write short notes on :

(*a*) Surrender Value of a Life Policy.

(*b*) Individual Policy.

(*c*) Ratio of gain.

PRACTICAL EXERCISES — I

RETIREMENT OF A PARTNER

1. (*a*) A, B and C are partners in a business sharing profits and losses in the ratio of 3 : 2 : 1. It is agreed that on the retirement or death of a partner goodwill of the firm shall be valued at two years' purchase of the average profits of the last five years. B retires and A and C decide to continue to share profits in the same proportions as before. The profits of the last five years amount to Rs. 5,000, Rs. 8,000, Rs. 6,000, Rs. 4,000 and Rs. 7,000.

What entries will be passed on B's retirement in the following cases ?

(1) Goodwill Account is raised at full value and is allowed to stand in books of account ;

(2) Goodwill Account is raised at full value but is written back to the Capital Accounts of the continuing partners ;

(3) Goodwill Account is raised equivalent to the retiring partner's share and is allowed to stand in books of account ;

(4) Goodwill Account is raised equivalent to the retiring partner's share but is written back to the Capital Accounts of the continuing partners ; and

(5) No Goodwill Account is raised in books of Account.

(*b*) Will there be any difference in the entries if Goodwill Account already appears in books at Rs. 9,000 ?

(*Ans.* Full Value of Goodwill Rs. 12,000. B's share Rs. 4,000).

2. A, B and C are three partners sharing profits in the ratio of 4 : 3 : 2. B retires and the goodwill of the firm is valued at Rs. 10,800. No goodwill appears as yet in the books of the firm. A and C decide to share profits in the future in the ratio of 5 : 3 and that no Goodwill Account is raised in the books of the firm.

Pass Journal Entry.

(*Ans.* Debit A and C with Rs. 1,950 and Rs. 1,650 and Credit B with Rs. 3,600).

3. (*a*) X, Y and Z were partners sharing profits in proportion to 5 : 3 : 2. Goodwill does not appear in the books but it is agreed to be worth Rs. 1,00,000. Y retires from the firm and X and Z decide to share future profits equally.

You are required to make adjustment entry for goodwill without opening goodwill account at all. Show your working clearly. (*Delhi SSCE, 1983*)

(*b*) A, B and C are partners sharing profits in the ratio of 3 : 4 : 2. B retires and the goodwill of the firm is valued at Rs. 15,750. No goodwill account appears in the books of the firm.

A and C decide to share profits in the ratio of 5 : 3. No goodwill is to be raised in the books of the firm. Give journal entries (with full narration) to record the above. (*Adapted from All India SSCE, 1986*)

(*c*) B retires from the firm of A, B and C sharing profits in the ratio of 3 : 2 :1 respectively. For the purpose of B's retirement, goodwill of the firm has been valued at Rs. 5,400 and B's share of the same is adjusted into the capital accounts of A and C who are going to share profits equally in future. (No goodwill account is to be raised).

Pass the necessary journal entry to record this arrangement.

(*Adapted from Delhi SSCE, 1979*)

[*Ans.* (*a*) Debit Z and Credit Y with Rs. 30,000. (*b*) Debit A and C with Rs. 4,593·75 and Rs. 2,406·25 and credit B with Rs. 7,000 (*c*) Debit C and credit B with Rs. 1,800].

4. A, B and C are partners sharing profits and losses in the ratio of 4 : 3 : 1. B retires, selling his share of profit to A and C for Rs. 8,100, Rs.

3,600 being paid by A and Rs. 4,500 by C. The profit for the year after B's retirement was Rs. 10,500.

You are required (*i*) to give necessary journal entries to record the above-said sale of B's share to A and C, and (*ii*) to calculate the new profit sharing ratio and distribute the profit between A and C. (*Delhi SSCE,1984*)

(*Ans.* Debit A and C with Rs. 3,600 and Rs. 4,500 and credit B with Rs. 8,100 on account of Goodwill. Share of profit : A Rs. 7,000, B Rs. 3,500).

5. A, B and C are partners sharing profits and losses in the ratio of 4 : 3 : 1 respectively. B retires, selling his share of profit to A and C, who continue the business, for Rs. 10,000, Rs. 6,000 being paid by A and the balance by C.

(*a*) Pass the necessary journal entry to record the sale of B's share to A and C assuming that no Goodwill Account is raised in books of account.

(*b*) The profit for the year after B's retirement is Rs. 20,000. Distribute it between A and C, giving reasons why you do so.

[*Ans.* (*a*) Debit A and C with Rs. 6,000 and Rs. 4,000 and credit B with Rs. 10,000 on account of Goodwill. (*b*) Share of Profit : A Rs. 14,500 ; B Rs. 5,500].

6. A, B and C are partners sharing profits and losses as 5 : 3 : 2 respectively. Their capital accounts are fixed at A Rs. 5,000, B Rs. 3,000 and C Rs. 2,000 and interest on capital is allowed by the firm at 15 per cent per annum. The partnership agreement provides that on the death or retirement of a partner the goodwill of the firm is to be valued at 2 years' purchase of the average net profits of 3 years before charging interest on capital. A retires on 31st March, 1989. The firm's Profit and Loss Accounts show the following net profit (after charging interest on capital) during the three years ended :

31st March, 1987	Rs. 1,750
31st March, 1988	Rs. 2,850
31st March, 1989	Rs. 2,900

You are required to show A's Capital Account.

(*Ans.* A's Capital Rs. 11,200).

7. A and B are in partnership sharing profits and losses in proportion to their capitals of Rs. 20,000 and Rs. 10,000. B retires on 30th June, 1989, and A takes over the entire business. B's capital on the date of retirement works out to be Rs. 12,000, payable as Rs. 4,000 down and the balance in 4 equal quarterly instalments with interest at 12 per cent per annum payable on the balance due at the beginning of each quarter.

Prepare B's Loan Account.

(*Ans.* Instalments : First Rs. 2,240 ; Second 2,180 ; Third Rs. 2,120, Fourth 2,060).

8. A and B are equal partners. Their partnership deed contains a clause that any partner may retire from the firm by giving six months' notice in writing.

The retiring partner, according to the partnership deed, is to be paid :

(*a*) The amount of his capital.

(*b*) His share of profit to the date of retirement, calculated on the basis of the average profit of the three preceding completed years.

(*c*) His share of goodwill calculated at one and a half times the average profit of the three preceding completed years.

A gave notice of his retirement on 1st April, 1989 when balance of his Capital was Rs. 6,000 and that of Current Account (Dr.) Rs. 1,400. The profits for the three preceding completed years were : Rs. 4,800, Rs. 6,200 and Rs. 4,000.

What amount is due to A in accordance with the terms of the partnership agreement ? This is agreed to be paid in 3 equal quarterly instalments together with interest at 16 per cent per annum. Prepare A's Loan Account.

(*Ans.* A's Capital Rs. 9,600 ; Instalments : First Rs. 3,584 ; Second Rs. 3,456 ; Third Rs. 3,328).

9. Ram, Sham and Mohan were in partnership sharing profits and losses in the proportions of 3 : 2 : 1. On 1st April, 1989, Sham retires from the firm. On that date, their Balance Sheet was as follows :

Liabilities		Rs.	*Assets*	Rs.
Trade Creditors		3,000	Cash-in-Hand	1,500
Bills Payable		4,500	Cash at Bank	7,500
Expenses Owing		4,500	Debtors	15,000
Reserve Fund		13,500	Stock	12,000
Capitals :			Factory Premises	22,500
Ram	15,000		Machinery	8,000
Sham	15,000		Loose Tools	4,000
Mohan	15,000	45,000		
		70,500		70,500

The terms were :

(*i*) Goodwill of the firm was valued at Rs. 13,500.

(*ii*) Expenses owing to be brought down to Rs. 3,750.

(*iii*) Machinery and Loose Tools are to be valued at 10% less than their book value.

(*iv*) Factory premises is to be revalued at Rs. 24,300.

Show the Revaluation Account, Partners' Capital Accounts and prepare the Balance Sheet of the firm after the retirement of Sham.

(*Adapted from All India SSCE, 1983*)

(*Ans.* Profit on Revaluation Rs. 1,350. Sham's Loan Account Rs. 24,450. Balance Sheet Total Rs. 84,600).

10. A, B and C are partners in a business, sharing profits and losses in the ratio of 3 : 2 : 1. Their Balance Sheet as at 31st March, 1989 was as follows :

BALANCE SHEET of A, B and C

Liabilities		Rs.	Assets	Rs.
Bills Payable		1,600	Cash	1,200
Sundry Creditors		1,600	Bank	2,000
Reserve Fund		12,000	Sundry Debtors	18,000
Capital Accounts :			Stock	14,000
A	Rs. 20,000		Machinery	12,000
B	Rs. 20,000		Land and Building	28,000
C	Rs. 20,000	60,000		
		75,200		75,200

On 1st April, 1989 C retires from the Firm. It is agreed to adjust the values of assets as follows :

(*a*) That a provision of 4% on Sundry Debtors be made for Doubtful Debts.

(*b*) That the value of Stock be depreciated by 5% and that of Machinery by 10%.

(*c*) That Land and Buildings be revalued at Rs. 30,200.

(*d*) That C's Capital Account be closed by transferring it to his Loan Account.

(*e*) An unrecorded asset is valued at Rs. 780.

Prepare a Revaluation Account (Profit and Loss Adjustment Account), Capital Accounts of Partners and the Balance Sheet of A and B, the remaining partners.

(Adapted from Delhi SSCE, 1982)

(*Ans*. Profit on Revaluation Rs. 360. C's Loan Rs. 22,060. Balance Sheet Total Rs. 75,560).

11. Ajoy, Bijoy and Chinmoy were carrying on business in partnership, sharing profits and losses in the ratio of 2 : 1 : 1. On 31st March, 1989, Bijoy decided to retire from the firm and the following terms were agreed upon :

(*a*) A typewriter purchased on 1st April, 1987 for Rs. 1,200 and charged to office expenses account in 1987-88 has to be brought into account after allowing 15 per cent per annum depreciation on reducing instalment basis.

(*b*) Furniture and Fittings are to be written down by Rs. 600 and Stock by Rs. 5,000.

(*c*) The provision for Bad and Doubtful Debts standing in the books at Rs. 4,000 is to be reduced by 25 per cent.

(*d*) A liability in respect of workmen's compensation for Rs. 2,100, not acknowledged by the partnership as a valid claim is, however, to be provided for. Outstanding expenses on this date are Rs. 167.

(*e*) Goodwill of the firm is valued at Rs. 24,000.

(*f*) The capital accounts of the partners on 31st March, 1989 stood at : Ajoy Rs. 20,000, Bijoy Rs. 15,000 and Chinomoy Rs. 10,000.

Ajoy and Chinmoy agree that Goodwill Account shall not continue in the books and the amount payable to Bijoy shall be brought in by them in their new profit-sharing ratio.

You are required to pass journal entries to record the above transactions.

(*Ans.* Loss on Revaluation Rs. 6,000. Amount due to Bijoy Rs. 19,500).

12. The following was the Balance Sheet of A and B as at 31st March, 1989 :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
A's Capital	10,000	Machinery	20,000
B's Capital	7,500	Patents	2,000
Reserve Fund	6,000	Stock	5,000
Employee's Provident Fund	500	Debtors	4,000
Sundry Creditors	2,000	Cash	1,000
Profit and Loss A/c	6,000		
	32,000		32,000

A retired from the business on 1st April, 1989. According to the Partnership Deed, goodwill is to be calculated at two years' purchase of the average profits of the three years preceding dissolution of the partnership. The profits in the years ending 31st March, 1987 and 31st March, 1988, were Rs. 5,000 and Rs. 4,000 respectively. The Patents are valueless. Machinery is to be depreciated by 10%. A reserve of 5% for Bad and Doubtful Debts is to be created on the Book Debts.

Assuming that these adjustments are carried out, show the Capital Accounts of the partners and the Balance Sheet of B after A has been paid off. B borrows money from his bank on the security of Machinery and Stock to pay off A. Cash Balance of Rs. 1,000 is to be retained for day-to-day working.

(*Ans.* Loss on Revaluation Rs. 4,200. A receives Rs. 18,900 ; B's Capital Rs. 16,400. Balance Sheet Total Rs. 37,800).

13. The Balance Sheet of X, Y and Z who were sharing profits in proportions to their Capitals stood as follows on 31st March, 1989 :

BALANCE SHEET as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Sundry Creditors :	6,900	Cash at Bank		5,500
Capital Accounts :		Sundry Debtors	5,000	
X	20,000	*Less* Reserve	100	4,900
Y	15,000	Stock		8,000
Z	10,000	Plant and Machinery		8,500
		Land and Building		25,000
	51,900			51,900

Y retires on the above date and the following readjustments of assets and liabilities have been agreed upon :

(*i*) That Stock be depreciated by 6%.

(*ii*) That the Reserve for Doubtful Debts be brought upto 5% on Debtors.

(*iii*) That the Land and Buildings be appreciated by 20%.

(*iv*) That a provision of Rs. 770 be made in respect of outstanding legal charges.

(*v*) That the goodwill of the entire firm be fixed at Rs. 10,800 and Y's share of the same be adjusted into the accounts of X and Z who are going to share in future in proportions of $\frac{5}{8}$ and $\frac{3}{8}$ respectively (no Goodwill Account being raised).

(*vi*) That the entire capital of the firm, as newly constituted, be fixed at Rs. 28,000 between X and Z, after passing entries in their accounts for goodwill (*i.e.*, actual cash to be paid off to, or to be brought in by, the continuing partners, as the case may be).

Pass Journal Entries necessary to give effect to the above arrangements, and prepare the Balance Sheet of X and Z, transferring Y's share of Capital and Goodwill to a separate Loan Account in his name.

(*Ans*. Profit on Revaluation Rs. 3,600. X withdraws Rs. 2,150. Z brings in Rs. 1,350. Y's Loan Rs. 19,800. Balance Sheet Total Rs. 55,470).

14. The Balance Sheet of M, N and O who are sharing profits and losses in the ratio of 3 : 2 : 1 respectively was as follows on the 31st March, 1989 :

Liabilities		Rs.	*Assets*	Rs.
Bills Payable		6,400	Cash in hand	150
Sundry Creditors		12,500	Cash at Bank	25,500
Capitals :			Bills Receivable	5,400
M	40,000		Book Debts	17,800
N	25,000		Stock	22,300
O	20,000	85,000	Furniture	3,500
Profit and Loss Account		4,500	Plant and Machinery	9,750
			Building	24,000
		1,08,400		1,08,400

M retired from business from 1st April, 1989 and his share in the firm is to be ascertained on a revaluation of assets as follows :

Stock Rs. 20,000 ; Furniture Rs. 3,000 ; Plant and Machinery Rs. 9,000; Buildings Rs. 20,000 ; and Rs. 850 are to be provided for doubtful debts. The goodwill of the firm is agreed to be valued at Rs. 6,000. After M's retirement N and O decided to write off goodwill as Rs. 4,500 to N and Rs. 1,500 to O.

M is to be paid Rs. 11,050 in cash on retirement and the balance in three equal yearly instalments with interest at 15% per annum.

(*a*) Calculate new profit sharing ratio of N and O.

(*b*) Pass the Journal entries and give the account of M till it is duly closed. (*Adapted from All India SSCE, 1985, 81*)

(*Ans.* M's Loan Rs. 40,000 after being paid off Rs. 11,050 in cash. Yearly instalments Rs. 16,000, Rs. 14,500, Rs. 13,000 and Rs. 11,500. New profit sharing ratio 17 : 7).

15. P, Q and R were partners sharing profits and losses in the ratio of 5/10, 3/10, 2/10 respectively. They had taken out a joint life policy of the face value of Rs. 20,000. On 31st March, 1989, its surrender value was Rs. 4,000. On that date the Balance Sheet of the firm stood as under :

Liabilities		Rs.	*Assets*	Rs.
Sundry Creditors		5,300	Fixed Assets	25,000
Outstanding Expenses		700	Stock	11,000
Reserve		3,000	Book Debts	9,000
Capitals :			Cash at Bank	2,000
P	20,000			
Q	10,000			
R	8,000			
		38,000		
		47,000		47,000

On this date, Q decided to retire and for the purpose —

1. Goodwill was valued at Rs. 15,000.
2. Fixed assets were valued at Rs. 30,000.
3. Stock was considered as worth Rs. 10,000.

Q was to be paid by cash brought in by P and R in such a way as to make their capitals proportionate to their new profit-sharing ratio which was to be 3/5 and 2/5 respectively. Goodwill was to be passed through books without raising a goodwill account. The joint life policy was also not to appear in the Balance Sheet.

Record these matters in the Journal of the firm and prepare the resultant Balance Sheet. (*B.Com. Delhi, 1968*)

(*Ans.* Profit on Revaluation 4,000. Cash brought in by P and R Rs. 5,400 and Rs. 12,400. Balance Sheet Total Rs. 51,000).

DEATH OF A PARTNER

16. A and B were equal partners. A died on 31st March 1989. Accounts were prepared at the close of the financial year on 31st March, 1989, when it was found, after transferring the profit for the year in the ordinary way, that the Partners Accounts stood as follows :

A (Capital Account) Rs. 8,000 ; A (Current Account — Cr.) Rs. 962;

B (Capital Account) Rs. 7,000 ; B (Current Account — Cr.) Rs. 852.

It was agreed with A's Executors that the value of the goodwill, which had not hitherto appeared in the books, should be taken at Rs. 3,000, and that the assets and liabilities should be revalued. Valuations were made with the following results : the book value of the Plant and Machinery was reduced by Rs. 500 ; the Provision for Bad Debts was found to be excessive by Rs. 200 ; the Stock was reduced by Rs. 350 ; the Sundry Creditors were found to

be overstated by Rs. 670 ; and the Patents (book value Rs. 300) were held to be of no value.

Show Partners' Capital Accounts as they would appear in the reconstructed Balance Sheet, assuming that the Current Accounts were merged in the Capital Accounts.

(*Ans*. B's Capital Rs. 9,212. A's Loan Rs. 10,322).

17. A, B and C were partners. Their Partnership Deed provided that they were to share profits thus : A 20 per cent, B 40 per cent and C 40 per cent ; and that if a partner died, his Capital should remain in the business for a stated period at a fixed rate of interest, but that the deceased partner's share should be credited with an amount for Goodwill based upon one and a half years' average profits for the five years prior to his death. C died, and the profits of the firm for the five years were agreed at Rs. 1,600, Rs. 2,800, Rs. 2,400, Rs. 3,600 and Rs. 2,000 respectively.

Prepare a statement showing the amount of Goodwill to be credited to C's Account and give the Journal entries in the firm's books necessary to carry out the transactions, assuming no Goodwill Account is to be raised.

(*Ans*. C's share of Goodwill Rs. 1,680. Debit A and B with Rs. 560 and Rs. 1,120 and credit C with Rs. 1,680).

18. Following is the Balance Sheet of Black, Brown and White as on 31st March, 1989 :

BALANCE SHEET as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Capital Accounts —		Plant and Machinery	10,000
Black	10,000	Stock	4,000
Brown	5,000	Sundry Debtors	6,000
White	5,000	Cash at Bank	5,000
Sundry Creditors	2,200	Cash in Hand	200
Reserve Fund	3,000		
	25,200		25,200

White died on 30th June, 1989. Under the terms of the Partnership Deed the executors of a deceased partner were entitled to (*a*) amount standing to the credit of the partner's Capital Account ; (*b*) share of goodwill on the basis of twice the average of the past three years profits ; and (*c*) share of profit from the closing of the last financial year to the date of death on the basis of the last year's profit.

Profits for the years ended 31st March 1987, 1988 and 1989 were respectively Rs. 6,000, Rs. 8,000 and Rs. 7,000.

Profits were shared in the ratio of capitals.

Pass the necessary journal entries and prepåre the Capital Account of White.

(*Ans*. Amount due to legal representatives of White Rs. 9,687·50).

19. A, B and C are partners in a Firm. On 10th April, 1986 they took out a Joint Life Policy for Rs. 3,00,000 upon which an annual premium of Rs. 12,000 is payable, Premium is considered as an ordinary business expense. A, B and C share Profit and Loss in the ratio of 3 : 2 : 1

respectively. On 31st March 1989 C died. Give necessary journal entries to record the above transactions for the period 1986 to 1989.

(*Adapted from Delhi SSCE, 1981*)

20. A and B, who share profits in the ratio 2 : 3, took out a Joint Life Policy on 1st April, 1985 of Rs. 10,000 for 10 years paying annual premium of Rs. 1,000.

B died on 8th June, 1989 and the claim was received on 1st August, 1989.

The surrender values of the Policy were :

31st March, 1986	—	Nil
31st March, 1987	—	Rs. 200
31st March, 1988	—	Rs. 550
31st March, 1989	—	Rs. 900

Write up the Joint Policy Account. (*Adapted from Delhi SSCE, 1984*)

21. Sharma, Gupta and Jain share the profits in the ratio of 1/2, 3/10 and 1/5 respectively. They took out a joint life policy of Rs. 15,000 paying an annual premium of Rs. 600 commencing from 1st April, 1984. The surrender value of the joint life policy (on 31st March) was as under :

1985 — Nil ; 1986 — Rs. 200 ; 1987 — Rs. 500 ; 1988 — Rs. 850 ; and 1989 — Rs. 1,350.

Jain died on 1st October, 1989, and the insurance company paid Rs. 15,000 on 31st October, 1989. The books of the firm are closed on 31st December every year. Show the Joint Life Policy and the Joint Life Policy Reserve Accounts. (*All India SSCE, 1982, Comptt.*)

PRACTICAL EXERCISES — II

RETIREMENT OF A PARTNER

1. The following was the Balance Sheet of Brown & Co., as on 31st March, 1989 :

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Capital Accounts :			Goodwill	2,000
	Rs.		Fixtures	450
Brown	10,000		Stock	17,212
Green	8,000		Debtors	7,337
Red	5,000	23,000	Cash	192
Sundry Creditors		4,191		
		27,191		27,191

Profits were shared in the proportions Brown 2/5ths, Green 2/5ths and Red 1/5th. Brown retired on 1st April, 1989, and in accordance with the partnership agreement, the firm's Goodwill was valued on that date at Rs. 5,530. Green and Red each brought in further Rs. 2,000 capital, and Brown withdrew share of capital (including Goodwill) except for Rs. 8,000 which he left as a loan to the firm.

Draw up the Balance Sheet of the firm to show the position after carrying out the above.

(*Ans.* Cash paid to Brown Rs. 3,412. Balance Sheet Total Rs. 31,309).

2. A, B and C were in partnership sharing profits 2 : 2 : 1. The Balance Sheet of the firm at 31st March, 1989 was as follows :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Capital Accounts :		Plant and Machinery	2,000
A	7,000	Hand Carts	2,500
B	5,000	Stock	7,500
C	3,000	Debtors	4,500
Creditors	5,000	Balance at Bank	3,500
	20,000		20,000

A retired on 31st March, 1989 and B and C continued in the business sharing profits 3 : 2. On A's retirement, it was agreed that Hand Carts should be revalued at Rs. 3,000 and goodwill at Rs. 5,000. A agreed to take one Hand Cart valued at Rs. 1,000 and Rs. 3,500 in cash. The balance of his capital account was to be left as loan to the new firm.

You are required to prepare —

(*a*) the Capital Accounts of the partners taking into account the above transactions, and

(*b*) the Balance Sheet of the new firm assuming that Goodwill continues to appear in books.

(*Ans*. Capitals : B Rs. 7,200 ; C Rs. 4,100. A's Loan Rs. 4,700. Balance Sheet Total Rs. 21,000).

3. A, B and C were carrying on business in partnership sharing profits and losses in the ratio of 3 : 2 : 1 respectively. On 31st March, 1989 Balance Sheet of the firm stood as follows :

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Sundery Creditors		13,590	Cash	5,900
Capital Accounts :			Debtors	8,000
A	15,000		Stock	11,690
B	10,000		Buildings	23,000
C	10,000			
		35,000		
		48,590		48,590

B retired on the above-mentioned date on the following terms :

(*i*) Buildings be appreciated by Rs. 7,000.

(*ii*) Provision for bad debts be made @ 5% on Debtors.

(*iii*) Goodwill of the firm be valued at Rs. 9,000 and adjustment in this respect be made without raising Goodwill Account.

(*iv*) Rs. 5,000 be paid to B immediately and the balance due to him be treated as a loan carrying interest @ 18% per annum.

Pass Journal entries to record the above-mentioned transactions and show the balance sheet of the firm as it would appear immediately after B's retirement.

(*Ans.* Balance Sheet Total Rs. 50,190. B's Loan Rs. 10,200).

4. Lal, Bal and Pal were partners ; sharing profits in the ratio of 2 : 2 : 1 respectively. Their summarised Balance Sheet was as follows :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Capital Accounts :		Goodwill	40,000
Lal	1,40,000	Fixed Assets	1,80,000
Bal	1,00,000	Debtors	70,000
Pal	60,000	Stock	90,000
Current Liabilities	92,000	Cash at Bank	12,000
	3,92,000		3,92,000

Pal retired and his interest in the firm valued at Rs. 80,000 was purchased by Lal and Bal by bringing in cash in the proporation in which they share profits.

Bal's son Dev was admitted to the partnership on the following terms :

(*i*) Dev would bring in Rs. 1,00,000 in the business for one-fourth share in profits to be surrendered by Bal.

(*ii*) Goodwill is to be written off and Fixed Assets to be revalued at Rs. 2,40,000 immediately before his admission to the partnership.

(*iii*) Capitals of Lal and Bal to be adjusted according to new profit sharing ratio taking Dev's Capital as base.

Prepare all the Capital Accounts, Bank Account and the Balance Sheet of the reconstituted firm. (*Delhi SSCE, 1988*)

(*Ans.* Balance Sheet Rs. 4,92,000).

5. A and B are partners in a business sharing profits and losses as to A 3/5ths and to B 2/5ths. Their Balance Sheet as on 31st March, 1989 is given below :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Capitals :		Machinery	19,500
A Rs. 20,000		Stock	16,000
B Rs. 15,000	35,000	Debtors	15,000
Reserve	15,000	Cash at Bank	6,000
Sundry Creditors	7,500	Cash in Hand	1,000
	57,500		57,500

On the above date A decides to retire from the business owing to illness and B takes it over. The following revaluations are made :

(*a*) Goodwill of the firm is valued at Rs. 15,000.

(*b*) Depreciate Machinery by 10 per cent and Stock by 15 per cent.

(*c*) A Bad Debts provision is raised against Debtors at 5% and a Discount Reserve against Creditors at 4 per cent.

Journalise the above transactions in the books of the firm and give the Balance Sheet of A.

(*Ans.* A's Loan Rs. 35,120. Balance Sheet Total Rs. 67,400).

6. A, B and C are partners in a business, sharing profits and losses in the ratio 3 : 2 : 1. Their Balance Sheet on 31st March, 1989 was as follows:

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Sundry Creditors	1,600	Cash in Hand	600
Reserve Fund	6,000	Cash at Bank	1,000
Capitals :		Sundry Debtors	9,000
A	10,000	Stock	7,000
B	10,000	Machinery	6,000
C	10,000	Factory Building	14,000
	37,600		37,600

On that date C retires from business. It is agreed to adjust the values of assets as follows :

(*a*) To provide a reserve of 5% on Sundry Debtors for doubtful debts.

(*b*) To depreciate Stock by 5% and Machinery by 10%.

(*c*) To revalue Factory Building at Rs. 15,100.

(*d*) To value C's share of Goodwill at Rs. 10,000 and adjust it in the Capital Accounts of A and B who are going to share profits and losses equally.

Show the Profit and Loss Adjustment Account and the Partners' Capital Accounts and prepare the Balance Sheet of the continuing partners as on April 1, 1989.

(*Ans.* Profit and Loss Adjustment — Loss Rs. 300. Capitals A Rs. 12,850 ; B Rs. 1,900. C's Loan Rs. 20,950. Balance Sheet Total Rs. 37,300).

7. P, Q and R, sharing profits and losses as 4 : 3 : 1, had their capitals on April 1, 1989 Rs. 15,000, Rs. 15,000 and Rs. 10,000 respectively. The Partnership Deed provided (*i*) that interest would be payable on capital at 10% p.a., (*ii*) that in case of retirement, the goodwill would be valued at two years' purchase of the average divisible profits of the last five years, (*iii*) that the profit of the retiring partner to the date of retirement would be estimated on the basis of the average divisible profit of the last three years, and (*iv*) that the firm would effect a joint life policy of Rs. 40,000, charging the premium as expense.

P retired with effect from October 1, 1989. The surrender value of the policy as on that date was ascertained at Rs. 8,000 and to that date drawings amounted to P Rs. 3,000, Q Rs. 2,000 and R Rs. 1,000. Profits after charging interest and policy premiums were 1988-89 Rs. 10,000 ; 1987-88, Rs. 9,500 ; 1986-87 Rs. 7,200 ; 1985-86 Rs. 8,800 ; and 1984-85 Rs. 8,000.

Prepare the Capital Account of P.

(*Ans.* P's claim Rs. 27,450).

8. The Balance Sheet of X, Y and Z, who were sharing profits in the ratio of 4 : 3 : 2 respectively stood as follows on 31st March, 1989.

Liabilities		Amount Rs.	*Assets*		Amount Rs.
Sundry Creditors		4,140	Cash at bank		3,300
Capital Accounts :			Sundry Debtors	3,045	
X	12,000		*Less* Provision	105	2,940
Y	9,000		Stock		4,800
Z	6,000	27,000	Plant and Machinery		5,100
			Land and Building		15,000
		31,140			31,140

Y having given notice to retire from the firm, the following adjustments in the books of the firm were agreed upon :

(*a*) That Land and Building be appreciated by 10 per cent. (*b*) That provision for bad debts is no longer necessary. (*c*) That Stock be appreciated by 20 per cent. (*d*) That adjustment be made in the accounts to rectify a mistake previously made whereby Y was credited in excess by Rs. 810 while X and Z were debited in excess by Rs. 420 and Rs. 390 respectively. (*e*) That the goodwill of the firm be fixed at Rs. 5,400 and Y's share of the same be adjusted to that of X and Z who are going to share in future profits in the ratio of 2 : 1. (*f*) That the entire capital of the firm, as newly constituted be adjusted by bringing in or paying of cash so that the future capital of X and Z be in the ratio of 2 : 1.

Pass Journal Entries and prepare the Balance Sheet of the new firm showing Y's balance as loan.

(*Ans.* Y's Loan Rs. 10,845. Capitals : X Rs. 12,480, Z Rs. 6,240. Balance Sheet Total Rs. 33,705).

9. The firm of A, B & Co., consisted of three partners A, B and C who shared profits and losses in the ratio of 10 : 6 : 4 respectively. The following was their Balance Sheet as on 31st March, 1989 :

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Trade Creditors	38,000	Goodwill		1,00,000
Bills Payable	59,000	Furniture		12,000
A's Loan	28,000	Stock		1,00,000
Capitals :		Debtors	1,80,000	
A	2,00,000	*Less* Reserve	7,000	1,73,000
B	1,00,000	Investments		50,000
C	1,00,000	Bank		89,000
		Cash		1,000
	5,25,000			5,25,000

A retired as from that date on the following terms : (*a*) His capital account was credited with Rs. 50,000 for his further share of goodwill and B and C decided to raise Goodwill in books at full value. (*b*) Furniture and Stock were depreciated by 10 per cent. (*c*) The provision for bad debts was

increased to 5%. (*d*) Investments were appreciated by 2 per cent. (*e*) A was paid off by cheque leaving a balance of Rs. 4,000 at Bank.

The partners after the retirement of A agreed to eliminate goodwill from the books and to share profits and losses equally.

You are required to show by means of ledger accounts the effect of the above agreement and the Balance Sheet of B and C after A's retirement.

(*Ans.* Loss on Revaluation Rs. 12,200. A's Loan Rs. 1,86,900. Balance Sheet Total Rs. 3,30,240).

10. A and B are in partnership as equal partners. A, by agreement, retires and his son S joins the firm on the basis of one-third share of profits.

The balances in the books were :

	Debit	Credit
	Rs.	Rs.
Goodwill	1,200	
Bank	800	
Other assets	5,900	
Creditors		400
Capital accounts :		
A		3,800
B		3,700
	7,900	7,900

Goodwill is agreed at Rs. 3,000 and written up accordingly. A is to be paid off leaving Rs. 500 cash in bank. S is to provide such sum as will make his capital proportionate to his share of profit.

Assuming the arrangement was carried out, show the journal entries required.

(*Ans.* A's Loan (Rs. 4,700 – Rs. 2,600 cash paid) Rs. 2,100. S's Capital Rs. 2,300. Balance Sheet Total Rs. 9,400).

11. The Balance Sheet of A, B and C on 1st April, 1989, the date of A's retirement, was as follows :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Creditors	25,000	Goodwill	15,000
Capital Accounts :		Land and Buildings	40,000
A	40,000	Plant and Machinery	28,000
B	40,000	Motor Car	27,000
C	30,000	Debtors	24,000
		Cash at Bank	1,000
	1,35,000		1,35,000

The following terms have been agreed upon :

(*i*) Goodwill should be raised to Rs. 21,000.

(*ii*) The value of Land and Buildings should be appreciated by Rs. 10,000.

(*iii*) Plant and Machinery should be reduced to Rs. 23,000.

(*iv*) Create provision of 5% on Debtors for bad and doubtful debts

(*v*) Create provision of Rs. 700 on Creditors.

(*vi*) The entire sum payable to A is to be brought by B and C in such a manner that their Capital Accounts are in proportion to their profit sharing ratio which is equal.

(*vii*) The remaining partners decided not to show Goodwill as an asset.

Prepare (1) Revaluation Account,

(2) Partners' Capital Accounts,

(3) Bank Account,

(4) Balance Sheet after A's retirement.

(*Adapted from All India SSCE, 1984*)

(*Ans.* Profit on Revaluation Rs. 4,500. B and C bring Rs. 16,750 and Rs. 26,750. Capital of B and C Rs. 49,750. Balance Sheet Total Rs. 1,23,800).

12. On 31st March, 1989 the Balance Sheet of M/s. A, B and C, sharing profits and losses in proportion to their capitals, stood as follows :

Liabilities		Amount Rs.	*Assets*		Amount Rs.
Creditors		1,08,000	Cash at Bank		80,000
Capital Accounts :			Debtors	1,00,000	
A	4,50,000		*Less* Reserve	2,000	98,000
B	3,00,000		Stock		90,000
C	1,50,000	9,00,000	Machinery		2,40,000
			Land and Building		5,00,000
		10,08,000			10,08,000

On the above date, B wants to retire from the firm and the remaining partners decide to carry on. The following re-adjustments of assets and liabilities have been agreed upon before the ascertainment of the amount payable to B :

(*i*) that out of the Fire Insurance Premium paid on 1st January 1989, Rs. 10,000 be carried forward as unexpired,

(*ii*) that the Land and Building be appreciated by 10% ;

(*iii*) that the reserve for doubtful debts be brought upto 5% on debtors ;

(*iv*) that Machinery be depreciated by 5% ;

(*v*) that a provision of Rs. 15,000 be made in respect of an outstanding bill for repairs ;

(*vi*) that the goodwill of the entire firm be fixed at Rs. 1,80,000 and B's share of the same be adjusted in the Capital Accounts of A and C who share future profits in the proportion of 3/4ths and 1/4th respectively (no Goodwill Account being raised) ; and

(*vii*) that B be paid Rs. 50,000 in cash and the balance be transferred to his Loan Account.

Prepare Revaluation Account, the Capital Accounts of the partners and the Balance Sheet of the firm A and C. (*Adapted from All India SSCE, 1987*)

(*Ans.* Profit on Revaluation Rs. 30,000. Capitals : A Rs. 4,20,000 ; C Rs. 1,40,000. B's Loan Rs. 3,20,000. Balance Sheet Total Rs. 10,03,000).

DEATH OF A PARTNER

13. A, B and C are partners sharing profits and losses as 3 : 2 : 1. They take out a Joint Life Policy on 10th February, 1981 for Rs. 9,000 on their joint lives, the annual premium being Rs. 500. The surrender value of the policy at the end of each year is as follows :

1981 Nil : 1982 Rs. 400 ; 1983 Rs. 750 ; 1984 Rs. 1,150 ; 1985 Rs. 1,575 ; 1986 Rs. 2, 025 ; 1987 Rs. 2,500 ; 1988 Rs. 2,980 ; 1989 Rs. 3,470.

The premium is payable on 15th February every year.

B died on 6th March, 1989 and the amount of the policy was received on 10th April, 1989.

Pass the necessary journal entries, (*i*) if the premium is regarded as an expense of the firm, (*ii*) if the premium is regarded as an investment, and (*iii*) if the provision for the payment of premium is made out of divisible profits and the Joint Life Policy is shown in the Balance Sheet at surrender value.

14. A, B and C are equal partners in a trading firm. The capital of the firm is Rs. 3,00,000 held equally by the partners.

The firm has taken out a policy of Life Assurance for Rs. 90,000 on the joint lives of the partners, payable on the first death.

Under the partnership deed :

(*a*) A and B were entitled to be credited at the close of each year with partnership salaries of Rs. 9,000 and Rs. 8,000 respectively.

(*b*) In the event of death of a partner, Goodwill was to be valued at two years' purchase of the average profits of the three years preceding the death.

(*c*) Partners were to be charged 15% interest on their drawings and were to be allowed 15% interest on their capitals.

B died on 1st January, 1989. His drawings during 1988 amounted to Rs. 10,000 and interest thereon Rs. 900.

The profits of three years preceding the death (after charging partners salaries and interest) were : 1986 Profit Rs. 1,06,000, 1987 Loss Rs. 16,000 ; 1988 Profit Rs. 45,000.

Prepare B's Current and Capital Accounts as they would appear in the books of the firm after receipt of the assurance policy money.

(*Ans.* B's Current Account (Cr.) Rs. 87,100. B's Capital Account Rs. 1,00,000).

15. A and B are in partnership sharing profits and losses 4/7ths and 3/7ths respectively. They insure their lives jointly for Rs. 98,000 at an annual premium of Rs. 4,998 to be debited to the business. B dies three months after the date of the last Balance Sheet. According to the Partnership Deed, the legal personal representatives of B are entitled to the following payments :

(*b*) Interest on above capital at 12% per annum to date of death.

(*c*) His share of profit to date of death calculated on the basis of last year's profit.

(*d*) His share of the Goodwill which is valued at two years' purchase of the average net profits of the last three years *before* charging the insurance premium.

His drawings are to bear interest at an average rate of 6% on the amount irrespective of the period.

The net profits for the last three years *after* charging insurance premium were Rs. 28,700, Rs. 30,100 and Rs. 29,400 respectively. B's capital, as per last Balance Sheet, was Rs. 60,000 and his Drawings to date of death were Rs. 4,000.

Draw up B's Account to be rendered to his representatives.

(*Ans.* Amount due to legal representatives of B Rs. 1,32,194).

16. A, B and C sharing profits and losses in the ratio of 5 : 3 : 2 took out a Joint Life Policy for Rs. 20,000 paying an annual premium of Rs. 800 starting from January 1, 1985. The surrender value of the policy was as follows :

1985 — Nil ;	1986 — Rs. 200 ;	1987 — Rs. 500 ;
1988 — Rs. 900 ;	1989 — Rs. 1,200.	

On 1st November, 1989 A died and the Insurance Company paid Rs. 20,000 on December 1, 1989. Write up the Joint Policy Account assuming that surrender value is treated as an asset. (*Adapted from All India SSCE, 1986*)

17. A, B and C were partners sharing profits and losses in the ratio of 3 : 2 : 1. In order to meet the financial requirements in case of death of a partner the firm took a joint life policy for Rs. 12,000 on 1st April, 1985 paying an annual premium of Rs. 1,000. The firm closes its books on 31st March each year, and the policy was shown at its surrender value each year. Such values at 31st March were as follows 1986 Rs. Nil ; 1987 Rs. 240 ; 1988 Rs. 840 ; 1989 Rs. 1,640. A died on 30th September, 1989 and the policy money was received on 18th November, 1989.

You are required to show the policy account in the books of the firm from 1st April, 1985 to 31st March, 1990.

18. P, R and S are in partnership sharing profits 4/8, 3/8 and 1/8 respectively. It is provided under the partnership deed that on the death of any partner his share of goodwill is to be valued at half of the net profits credited to his account during the last 4 completed years (books of account are closed on 31st March).

R died on 1st April, 1989. The firm's profits for the last 4 years were as follows : 1985-86 (Profit Rs. 1,20,000) ; 1986-87 (Profit Rs. 60,000) ; 1988 (Loss Rs. 20,000) and 1988-89 (Profit Rs. 80,000).

(1) Determine the amount that should be credited to R in respect of his share of goodwill.

(2) Pass journal entry without raising Goodwill Account for its adjustment assuming that profit sharing ratio between P and S in future will be 3 : 2. Show your working clearly. (*Adapted from Delhi SSCE, 1985*)

[*Ans.* (*a*) R's share of Goodwill Rs. 45,000. (*b*) Debit P and S with Rs. 12,000 and Rs. 33,000 and credit R with Rs. 45,000].

19. A, B and C are in partnership, sharing profits in the proportion of two-thirds, one-sixth, and one-sixth respectively, and in order to provide cash for the immediate payment of a portion of the amount due to any one of them in the event of death, in respect of both capital and goodwill, an assurance was effected on their lives jointly for Rs. 9,000 without profits, at an annual premium of Rs. 350 payable on 1st August every year.

A died on the 30th June 1989, three months after the annual accounts had been prepared and in accordance with the partnership agreement, his share of the profit to the date of death was estimated on the basis of the profit for the preceding year. In addition to this, the agreement provided for interest on capital at 15 per cent per annum on the balance standing to the credit of the capital account at the date of the last Balance Sheet, and also for goodwill, which was to be brought into account at two years' purchase of the average profits for the last three years, prior to charging the above-mentioned insurance premiums, but after charging interest on capital.

A's capital on 31st March 1989 stood at Rs. 12,000, and his drawings from then to the date of death amounted to Rs. 900 and interest thereon worked out to be Rs. 9.

The net profits of the business for the three preceding years amounted to Rs. 3,350, Rs. 4,150 and Rs. 4,050 respectively, after charging interest on capital but before charging insurance premiums. The premiums paid on policy are written off to Profit and Loss Account.

You are instructed to prepare A's Capital Account as at the date of death, for a settlement with his executors. (*Adapted from All India SSCE, 1987*)

(*Ans.* Amount due to A's executors Rs. 23,291).

20. A, B and C carried on business in partnership sharing profits and losses in proportion of 3 : 2 : 1 respectively.

The partnership deed provided that on the death of a partner, his executors be paid as under :

(*a*) The amount lying to the credit of his Capital Account on the date of death, less drawings made during the period.

(*b*) His share of profit till the date of death be taken at the sum calculated on the average of the last three completed years' profits.

(*c*) Goodwill be raised on the basis of the two years' purchase of the average of the last three years' profits.

The firm had insured the partners' lives separately — A for Rs. 10,000, B for Rs. 7,500 and C for Rs. 5,000. The premiums were charged to Profit and Loss Account.

The Capital Accounts carry interest @ 18 per cent per annum. The Balance Sheet on 1st April, 1989 showed the partners' capitals — A Rs. 20,000, B Rs. 15,000 and C Rs. 10,000.

A died on 30th June, 1989. He had drawn Rs. 3,500 during the period 1st April, 1989 to 30th June, 1989. The surrender value on 30th June, 1989 amounted in each case to one-half of the sum assured. The annual profits for the three completed years were Rs. 8,000, Rs. 7,500 and Rs. 9,000.

(*Adapted from IIB (Part II) May, 1977*)

(*Ans.* Amount due to A's executors Rs. 39,712·50).

4

Partnership Accounts—Dissolution of a Partnership Firm

DISSOLUTION OF PARTNERSHIP AND DISSOLUTION OF FIRM

There is a difference between dissolution of partnership and dissolution of firm. This may be explained with the help of an example. Suppose A and B are partners in a firm. They admit a new partner C. The partnership between A and B comes to an end and a new partnership between A, B and C comes into existence. This is dissolution of partnership. In this case, the firm continues. If, however, A and B decide to close the business of the firm permanently, there takes place dissolution of firm. This means complete breakdwon of partnership relation between all the partners. In such a case, the assets are disposed of, liabilities are paid of and whatever remains is paid to the partners in settlement of their accounts.

Dissolution of Partnership. It takes place on the—

1. Admission of a partner.
2. Retirement of a partner.
3. Death of a partner.

These cases have already been considered in detail.

DISSOLUTION OF FIRM

It takes place in the following cases :

1. **Dissolution by agreement.** A firm may be dissolved—
   (1) with the consent of all the partners, or
   (2) in accordance with a contract between the partners.
2. **Compulsory dissolution.** A firm is compulsorily dissolved—
   (1) when all the partners, or all the partners but one, become insolvent.
   (2) when the business of the firm becomes unlawful.
   (3) when all the partners but one retire from the firm.

Case (3) has been dealt with in the previous Chapter.

3. **Dissolution on the happening of certain contingencies.** In the following cases, a firm is dissolved only if there is a contract between the partners that the firm shall be dissolved on the happening of any of these events. These cases are :

(*a*) expiry of the period for which the firm was formed.

(*b*) completion of the particular adventure, if the firm was formed for the execution of that particular adventure.

(*c*) death of a partner.

(*d*) insolvency of a partner.

4. **Dissolution by notice of partnership at will.** Where partnership is at will, the firm may be dissolved by a partner by giving a notice in writing to the other partners of his intention to dissolve the firm.

5. **Dissolution by the Court.** When a partner files a suit for the dissolution of the firm, the Court may dissolve the firm on any one of the following grounds, namely :

(*a*) Where a partner becomes insane ;

(*b*) Where a partner becomes permanently incapable of performing his duties as a partner ;

(*c*) Where a partner is guilty of miscondut and is likely to affect prejudicially the carrying on of business of the firm ;

(*d*) Where a partner wilfully or persistently commits breach of agreements relating to the management of the affairs of the firm ;

(*e*) Where a partner transfers his interest in the firm to a third party ;

(*f*) Where the business has been working at a loss ;

(*g*) Where the Court regards it just and equitable.

SETTLEMENT OF ACCOUNTS

In settling accounts between the partners after the dissolution of a firm, regard is had to the agreement among the partners. In the absence of any specific agreement to this effect, the following rules apply :

(1) Losses, including deficiencies of capital, are paid first out of profits. If profits are not sufficient, they are then paid out of capital. If even capitals are not sufficient, the partners bring in sufficient cash in the profit sharing ratio to pay off these losses.

(2) The assets of the firm, including the sums, if any, contributed by the partners to make up losses or deficiencies of capital, are applied in the following manner and order :

(*a*) First of all the debts and liabilities of the firm to outsiders are paid.

(*b*) Then the advances made by the partners to the firm, as distinguished from capitals, are paid.

(*c*) The balance remaining after paying off the above items is divided among the partners to settle their capital accounts.

REALISATION ACCOUNT

When a firm is dissolved, the books of the firm are to be closed. This is done by preparing an account called REALISATION ACCOUNT.

Accounting Entries

When a firm is dissolved, as already observed, assets are disposed of and liabilities are paid off. In this process, some assets may realise more than their book value whereas others may realise less than their book value. Likewise, some liabilities may be settled at less than their book value. In order to find out the net effect, *i.e.*, profit or loss on realisation of assets and payment of liabilities, an account called, Realisation Account, is prepared. The profit or loss shown by this Account is transferred to the Capital Accounts of the partners in the profit sharing ratio. After this the accounts of the partners are settled among themselves. If the Capital Account of a partner shows debit balance, he brings in cash. The partners whose Capital Accounts show a credit balance are paid off. When this is done, all accounts in the books of the firm are closed.

The whole procedure is summed up as follows :

(1) All assets accounts (excepting cash, bank and debit balance of Profit and Loss Account) are closed by transfer to the debit of Realisation Account, at *book value*. This is done by passing the following entry :

Realisation A/c Dr.
    To Sundry Assets A/cs
(Being transfer of assets to Realisation Account)

An easy way to remember is that all assets which are to be converted into cash are closed by transfer to Realisation Account.

(2) All liabilities accounts (excepting Reserve Fund, credit balance of Profit and Loss Account, Loan by a partner, and Capital Accounts, *i.e.*, ownership liabilities) are closed by transfer to the credit of Realisation Account. This is done by passing the following entry :

Sundry Liabilities A/cs Dr.
    To Realisation A/c
(Being transfer of liabilities to Realisation Account)

Liabilities here mean *liabilities to outsiders.*

(3) When assets are disposed of, Cash or Bank is debited and Realisation Account is credited. The entry is :

Bank/Cash A/c Dr.
    To Realisation A/c
(Being the amount realised from the sale of assets)

(4) When any asset is taken over by a partner at an agreed valuation, the entry is :

Partner's Capital A/c Dr.
    To Realisation A/c
(Being the asset taken over by.........)

(5) When an asset, which is not recorded in books of account like Joint Life Policy (when premium is treated as an expense), is realised, the following entry is passed :

Cash A/c Dr.
    To Realisation A/c
(Being the amount realised on sale of asset not recorded in books of account)

(6) When any asset is taken over by a creditor at an agreed value the amount so agreed is deducted from the amount payable to the creditor. The balance due to the creditor, if any, is paid in cash. The entry for this is :

Realisation A/c Dr.
To Bank/Cash A/c
(Being the payment of net amount due to creditor......)

(7) When expenses of realisation are paid, Realisation Account is debited and Cash Account is credited. The entry is :

Realisation A/c Dr.
To Cash/Bank A/c
(Being payment of expenses on realisation)

Sometimes a partner is paid a fixed amount on account of expenses on dissolution and he agrees to bear the actual amount of expenses. The entry for the amount agreed to be paid to the partner is :

Realisation A/c Dr.
To Partner's Capital A/c
(Being the amount agreed to be paid to the partner on account of realisation expenses)

If the partner pays actual expenses out of his pocket, no entry is passed in the books of the firm. If the actual expenses are paid by the firm, the entry is :

Partner's Capital A/c Dr.
To Bank/Cash A/c
(Being payment of expenses payable by the partner)

(8) When liabilities including contingent liabilities are paid off, Realisation Account is debited and Cash or Bank Account is credited. The entry is :

Realisation A/c Dr.
To Cash/Bank A/c
(Being the payment of liabilities including contingent liability)

(9) When an unrecorded liability or outstanding liability is paid off, Realisation Account is debited and Cash Account is credited. The entry for this is :

Realisation A/c Dr.
To Cash A/c
(Being the payment of unrecorded/outstanding liability)

(10) When a partner agrees to discharge a liability, the entry is :

Realisation A/c Dr.
To Partner's Capital A/c
(Being the entry for taking over of liability by the partner)

(11) Any Reserve Fund or undistributed profit appearing in the Balance Sheet is transferred to the Capital Accounts of the partners in the profit sharing ratio. The entry for this :

Reserve Fund A/c	Dr.
Profit and Loss A/c	Dr.
To Partners' Capital A/cs	

(Being entry for transfer of Reserve Fund and undistributed profit to Partners' Capital A/cs)

As regards reserves or provisions made against some asset, *e.g.*, reserve for bad and doubtful debts, provision for depreciation, or joint life policy reserve, these are transferred to the credit of Realisation Account. The reason is simple. The assets against which these reserves are created are transferred to the debit of Realisation Account and therefore the reserves and provisions relating to these assets are transferred to the credit of Realisation Account. If the assets are transferred to Realisation Account at the net book value, no entry will be needed to transfer the reserves or provisions against these assets to Realisation Account.

(12) The balance of Realisation Account represents profit or loss, as the case may be, and is transferred to the Capital Accounts of the partners in their profit sharing ratio.

If there is a profit :

Realisation A/c	Dr.
To Partners' Capital A/cs	

(Being transfer of profit on realisation to Capital A/cs of partners)

If there is a loss :

Partners' Capital A/cs	Dr.
To Realisation A/c	

(Being transfer of loss on realisation to Capital A/cs of partners)

(13) Any Loan by a partner to the firm is paid off. The entry for this is :

Partner's Loan A/c	Dr.
To Cash A/c	

(Being payment of loan to partner)

(14) If the Capital Account of a partner shows debit balance, he brings in cash. The entry for this is :

Cash A/c	Dr.
To Partner's Capital A/c	

(Being amount brought in by partner whose Capital A/c shows debit balance)

(15) The partners whose Capital Accounts show credit balance are paid foliThe entry for this is :

C

Partners' Capital A/cs Dr.
To Cash A/c
(Being payment to partners whose Capital A/cs show a credit balance)

When the above entries are passed, all accounts in the books of the firm are closed.

The whole position as regards assets and liabilities to be transferred to Realisation Account may now be summed up by taking the Balance Sheet of a firm which is going to be dissolved :

BALANCE SHEET of A, B and C as on ....

Liabilities	How disposed of	Assets	How disposed of
Creditors Bills Payable Loan from A's wife	These are liabilities to outsiders and are transferred to the credit of Realisation A/c at Book Value	Cash Bank	
Loans from : B C	These are liabilities to proprietors, *i.e.*, partners, and are paid off only when the above liabilities have been paid off in full	BillsReceivable Debtors Stock Investments Joint Life Policy Furniture Plant Land Building Goodwill	Transferred to the debit of Realisation A/c at Book Value
Joint Life Policy Reserve, Investment Fluctuation Fund	Transferred to the credit of Realisation A/c		
Reserve Fund Profit & Loss A/c	Transferred to the credit of Capital A/cs		
Capitals : A B C	-----------		------------

Illustration 1. X, Y and Z carry on business in partnership sharing profits and losses in the proportion of 4 : 3 : 1 respectively. On 31st March, 1989, they agreed to dissolve their partnership when their position was as follows :

BALANCE SHEET OF X, Y & Z as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*		Amount Rs.
X's Capital	20,000	Freehold Property		18,000
Y's Capital	15,000	Machinery		12,000
Z's Capital	10,000		Rs.	
Reserve Fund	4,000	Book Debts	16,000	
Loan by X	3,000	*Less* Reserve	1,000	15,000
Creditors	8,000	Stock		13,000
		Cash		2,000
	60,000			60,000

The assets realised as follows :

Freehold Property Rs. 22,000, Machinery Rs. 11,000, Book Debts 10% less, Stock Rs. 12,000, Goodwill Rs. 4,000.

The sundry creditors were paid off at a discount of 2·5 per cent and the expenses of realisation amounted to Rs. 500. One quarter's rent Rs. 300 was outstanding and had to be paid.

Give Jounral Entries, Realisation Account, Cash Account and the Partners' Capital Accounts.

Solution :

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			Rs.	Rs.
1989 Mar. 31	Realisation A/c Dr.		59,000	
	To Stock A/c			13,000
	To Book Debts			16,000
	To Machinery A/c			12,000
	To Freehold Property A/c			18,000
	(Being transfer of assets to Realisation A/c)			
	Creditors Dr.		8,000	
	Reserve for Doubtful Debts A/c Dr.		1,000	
	To Realisation A/c			9,000
	(Being transfer of liabilities and reserve for doubtful debts to Realisation A/c)			
	Cash A/c Dr.		63,400	
	To Realisation A/c			63,400
	(Being amounts realised on sale of assets : Rs.			
	Freehold Property 22,000			
	Machinery 11,000			
	Book Debts 14,400			
	Stock 12,000			
	Goodwill 4,000)			

Date	Particulars		L.F.	Rs.	Rs.
1989 Mar. 31	Realisation A/c	Dr.		8,100	
	To Cash A/c				8,100
	(Being amount paid to creditors Rs. 7,800 and rent for one quarter Rs. 300)				
	Realisation A/c	Dr.		500	
	To Cash A/c				500
	(Being payment of expenses of realisation)				
	Realisation A/c	Dr.		4,800	
	To X's Capital A/c				2,400
	To Y's Capital A/c				1,800
	To Z's Capital A/c				600
	(Being transfer of profit on realisation to Partners' Capital A/cs)				
	Reserve Fund	Dr.		4,000	
	To X's Capital A/c				2,000
	To Y's Capital A/c				1,500
	To Z's Capital A/c				500
	(Being transfer of Reserve Fund to Partners' Capital A/cs)				
	Loan by X	Dr.		3,000	
	To Cash A/c				3,000
	(Being payment of X's loan)				
	X's Capital A/c	Dr.		24,400	
	Y's Capital A/c	Dr.		18,300	
	Z's Capital A/c	Dr.		11,100	
	To Cash A/c				53,800
	(Being payment of cash to partners in settlement of their accounts)				

LEDGER

CASH ACCOUNT

Dr. | Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Balance b/d	2,000	Mar. 31	By Realisation A/c (Liabilities)	8,100
	To Realisation A/c (Assets)	63,400		By Realisation A/c (Expenses)	500
				By X's Loan	3,000
				By X's Capital A/c	24,400
				By Y's Capital A/c	18,300
				By Z's Capital A/c	11,100
		65,400			65,400

Dr. **REALISATION ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Sundry Assets:		Mar. 31	By Creditors	8,000
	Rs.			By Reserve for Doubtful Debts	1,000
	Stock 13,000			By Cash	
	Book Debts 16,000			Assets realised :	
	Machinery 12,000			Rs.	
	Freehold Property 18,000	59,000		Property 22,000	
	To Cash :			Machinery 11,000	
	Rs.			Book Debts 14,400	
	Creditors 7,800			Stock 12,000	
	Rent 300	8,100		Good-will 4,000	63,400
	To Cash (Expenses)	500			
	To Profit on Realisation :				
	X 1/2 2,400				
	Y 3/8 1,800				
	Z 1/8 600	4,800			
		72,400			72,400

Dr. **X's LOAN ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Cash	3,000	Mar. 31	By Balance b/d	3,000

Dr. **CAPITAL ACCOUNTS** Cr.

1989		X Rs.	Y Rs.	Z Rs.	1989		X Rs.	Y Rs.	Z Rs.
Mar. 31	To Cash	24,400	18,300	11,100	Mar. 31	By Balance b/d	20,000	15,000	10,000
						By Realisation A/c	2,400	1,800	600
						By Reserve Fund	2,000	1,500	500
		24,400	18,300	11,100			24,400	18,300	11,100

Illustration 2. A, B and C decided to dissolve their partnership firm. Their position as on 31st March, 1989, the date of dissolution, was follows :

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Creditors	9,000	Cash		4,500
A's Loan	2,000	Bills Receivable		6,000
Reserve Fund	5,000	Debtors	20,000	
A's Capital	20,000	*Less* Reserve	500	19,500
B's Capital	15,000			

Contd.

Contd.

	Rs.		Rs.
		Stock	9,000
		Furniture	7,000
		C's Capital A/c	5,000
	51,000		51,000

They shared profits and losses in the ratio of 5 : 3 : 2.

Rs. 200 of the Debtors proved bad. Bills Receivable were realised at a discount of 5% ; Stock was sold as follows : 1/3rd at a discount of 15%, 1/3rd at a discount of 20% and the balance was taken over by B for Rs. 2,000. Furniture realised Rs. 5,500. Expenses of realisation amounted to Rs. 450.

Close the books of the firm.

Solution :

JOURNAL

1989			Rs.	Rs.
Mar. 31	Realisation A/c Dr. To Bills Receiveable A/c To Debtors A/c To Stock A/c To Furniture A/c (Being transfer of assets to Realisation A/c)		42,000	 6,000 20,000 9,000 7,000
	Creditors Dr. Reserve for Doubtful Debts A/c Dr. To Realisation A/c (Being transfer of creditors and Reserve for Doubtful Debts to Realisation A/c)		9,000 500	 9,500
	Cash A/c Dr. To Realisation A/c (Being amounts realised on sale of assets: Rs. Debtors 19,800 Bills Receivable 5,700 1/3rd Stock (3,000–15%) 2,550 1/3rd Stock (3,000–20%) 2,400 Furniture 5,500)		35,950	 35,950
	Realisation A/c Dr. To Cash A/c (Being amount paid to creditors)		9,000	 9,000

Date	Particulars		L.F.	Rs.	Rs.
1989 Mar. 31	B's Capital A/c	Dr.		2,000	
	To Realisation A/c				2,000
	(Being 1/3rd of Stock taken over by B)				
	Realisation A/c	Dr.		450	
	To Cash A/c				450
	(Being payment of expenses of realisation)				
	A's Capital A/c	Dr.		2,000	
	B's Capital A/c	Dr.		1,200	
	C's Capital A/c	Dr.		800	
	To Realisation A/c				4,000
	(Being transfer of Loss on Realisation to Partners' Capital A/cs)				
	Reserve Fund A/c	Dr.		5,000	
	To A's Capital A/c				2,500
	To B's Capital A/c				1,500
	To C's Capital A/c				1,000
	(Being transfer of Reserve Fund to Partners' Capital A/cs)				
	A's Loan A/c	Dr.		2,000	
	To Cash A/c				2,000
	(Being payment of A's Loan)				
	Cash A/c	Dr.		4,800	
	To C's Capital A/c				4,800
	(Being amount brought in by C to settle his account)				
	A's Capital A/c	Dr.		20,500	
	B's Capital A/c	Dr.		13,300	
	To Cash A/c				33,800
	(Being payment to A and B to settle their account)				

LEDGER

CASH ACCOUNT

Dr. | Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Balance b/d	4,500	Mar. 31	By Realiation A/c (Creditors)	9,000
	To Realisation A/c (Assets)	35,950		By Realisation A/c (Expenses)	450
	To C's Capital A/c	4,800		By A's Loan	2,000
				By A's Capital A/c	20,500
				By B's Capital A/c	13,300
		45,250			45,250

Dr. **REALISATION ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1989 Mar.31	To Sundry Assets :		1989 Mar.31	By Creditors	9,000
	Bills Receivable 6,000			By Reserve for Doubtful Debts	500
	Debtors 20,000			By Cash :	
	Stock 9,000			Assets realised	
	Furniture 7,000			Debtors 19,800	
		42,000		Bills Receivable 5,700	
	To Cash :			1/3rd Stock 2,550	
	Creditors	9,000		1/3rd Stock 2,400	
	To Cash (Exp.)	450		Furniture 5,500	
					35,950
				By B's Capital A/c (1/3rd Stock)	2,000
				By Loss on Realisation :	
				A 5/10 2,000	
				B 3/10 1,200	
				C 2/10 800	4,000
		51,450			51,450

Dr. **A's LOAN ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1989 Mar. 31	To Cash A/c	2,000	1989 Mar.31	By Balance b/d	2,000

Dr. **CAPITAL ACCOUNTS** Cr.

Date	Particulars	A Rs.	B Rs.	C Rs.	Date	Particulars	A Rs.	B Rs.	C Rs.
1989 Mar. 31	To Balance b/d			5,000	1989 Mar. 31	By Balance b/d	20,000	15,000	
	To Realisation A/c (Loss)	2,000	1,200	800		By Reserve Fund	2,500	1,500	1,000
	To Realisation A/c (1/3rd Stock)		2,000			By Cash	4,800		
	To Cash	20,500	13,300						
		22,500	16,500	5,800			22,500	16,500	5,800

Illustration 3. A, B and C sharing profits in the proportion of 3 : 2 : 1 agreed upon the dissolution of the firm. A was appointed to realise the assets and pay off the liabilities for which he was entitled to a lump sum amount of Rs. 1,000. The Balance Sheet of the firm on 31st March, 1[illegible] was as under :

BALANCE SHEET of A, B and C as on 31st March, 1989

Liabilities		Amount Rs.	*Assets*		Amount Rs.
Capital A/cs :			Machinery		40,500
A	50,000		Stock		7,500
B	20,000		Investments		20,000
		70,000	Debtors	9,300	
Creditors		18,500	*Less* Reserve	600	
Investment Fluctuation Fund		6,000			8,700
			C's Current A/c		11,500
			Cash		6,300
		94,500			94,500

The investments were taken over by A for Rs. 18,000. B takes over all the stock at Rs. 7,000 and the debtors amounting to Rs. 5,000 at Rs. 4,000. Machinery is sold for Rs. 55,000. The remaining debtors realise 50% of the book value. The actual expenses of realisation amounted to Rs. 450.

Show the necessary Ledger Accounts on the dissolution of the firm.

Solution :

LEDGER

REALISATION ACCOUNT

Dr. 1989			Rs.	1989			Cr. Rs.
Mar. 31	To Sundry Assets:	Rs.		Mar. 31	By Creditors		18,500
	Machinery	40,500			By Investments Fluctuation Fund		6,000
	Stock	7,500			By Reserve for Doubtdul Debts		600
	Investments	20,000			By A's Capital A/c (Investments)		18,000
	Debtors	9,300	77,300		By B's Capital A/c	Rs.	
	To Cash (Creditors)		18,500		Stock	7,000	
	To Cash (Exp.)		450		Debtors	4,000	11,000
	To Profit on Realisation to :				By Cash (Machinery	55,000	
	A	7,500			Debtors 50% of 4,300	2,150	57,150
	B	5,000					
	C	2,500	15,000				
			1,11,250				1,11,250

CASH ACCOUNT

Dr. 1989		Rs.	1989		Cr. Rs.
Mar. 31	To Balance b/d	6,300	Mar. 31	By Realisation A/c (Creditors)	18,500
	To Realisation A/c (Assets)	57,150		By Realisation A/c (Expenses)	450
	To C's Capital A/c	9,000		By A's Capital A/c	39,500
				By B's Capital A/c	14,000
		72,450			72,450

Dr. CAPITAL ACCOUNTS Cr.

		A	B	C			A	B	C
1989		Rs.	Rs.	Rs.	1989		Rs.	Rs.	Rs.
Mar. 31	To C's Current A/c			11,500	Mar. 31	By Balance b/d	50,000	20,000	
	To Realisation A/c (Assets)	18,000	11,000			By Realisation A/c (Profit)	7,500	5,000	2,500
	To Cash	39,500	14,000			By Cash			9,000
		57,500	25,000	11,500			57,500	25,000	11,500

Illustration 4. A and B are partners sharing profits and losses in the ratio of 2 : 1. On 31st March, 1989 when their Balance Sheet stood as follows, they decided to dissolve partnership :

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Captials :		Goodwill		5,000
A	25,000	Property		
B	3,700	Warehouse		5,000
Mortgage on Warehouse	4,000	Retail Shop		6,000
Bills Payable	1,100	Furniture		2,000
Creditors	11,700	Scooter		13,000
Profit and Loss	3,000	Stock		8,000
			Rs.	
		Debtors	7,500	
		Less Reserve	500	
				7,000
		Bank		2,500
	48,500			48,500

On 1st April 1989 the partners decided to dissolve the firm. It was agreed that A should take over the Warehouse, subject to the mortgage, and Stock of Rs. 3,000. Scooter realised Rs. 7,000. B took over the rest of the assets (excepting cash) at the book values, subject to an allowance of Rs. 500 for depreciation on Furniture and to an allowance of 10% of the debts for bad debts. Goodwill is valued at nill. Bills Payable were paid off in full, but Creditors were taken over by A. The firm had taken out a Joint Life Policy for Rs. 10,000. It was surrendered to the Life Insurance Corporation for Rs. 1,100.

Draw up Ledger Accounts and show how they would be closed.

Solution :

LEDGER

Dr. GOODWILL ACCOUNT Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	5,000	Apr. 1	By Realisation A/c (transfer)	5,000

Dr. **PROPERTY (Warehouse) ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	5,000	Apr. 1	By Realisation A/c (transfer)	5,000

Dr. **PROPERTY (Retail Shop) ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	6,000	Apr. 1	By Realisation A/c (transfer)	6,000

Dr. **FURNITURE ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	2,000	Apr. 1	By Realisation A/c (transfer)	2,000

Dr. **SCOOTER ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	13,000	Apr. 1	By Realisation A/c (transfer)	13,000

Dr. **STOCK ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	8,000	Apr. 1	By Realisation A/c (transfer)	8,000

Dr. **DEBTORS** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	7,500	Apr. 1	By Realisation A/c (transfer)	7,500

Dr. **BANK ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	2,500	April 1	By Realisation A/c (B/P)	1,100
	To Realisation A/c			By A's Capital	27,600

Contd.

Contd.

1989		Rs.	Rs.			
Apr. 1	(Scooter	7,000				
	Joint Life Policy	1,100)				
			8,100			
	To B's Capital		18,100			
			28,700			28,700

Dr. **A's CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (Assets)	8,000	April 1	By Balance b/d	25,000
	To Realisation A/c (Loss)	7,100		By Profit & Loss A/c	2,000
	To Bank	27,600		By Realisation A/c (Mortgage and Creditors)	15,700
		42,700			42,700

Dr. **B's CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (Assets)	19,250	April 1	By Balance b/d	3,700
	To Realisation A/c (Loss)	3,550		By Profit & Loss A/c	1,000
				By Bank	18,100
		22,800			22,800

Dr. **MORTGAGE ON WAREHOUSE ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (transfer)	4,000	April 1	By Balance b/d	4,000

Dr. **BILLS PAYABLE ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (transfer)	1,100	April 1	By Balance b/d	1,100

Dr. **CREDITORS** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (transfer)	11,700	April 1	By Balance b/d	11,700

Dr. **RESERVE FOR BAD DEBTS ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (transfer)	500	April 1	By Balance b/d	500

Dr. **PROFIT AND LOSS ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To transfer to Capital A/cs :		April 1	By Balance b/d	3,000
	Rs.				
	A 2/3rds 2,000				
	B 1/3rd 1,000	3,000			
		3,000			3,000

Dr. **REALISATION ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Sundry Assets : Rs.		April 1	By Sundry Liabilities Rs.	
	Warehouse 5,000			Mortgage 4,000	
	Retail shop 6,000			B/P 1,100	
	Fur. 2,000			Creditors 11,700	
	Scooter			Reserve for B/D 500	17,300
	13,000			By Bank	
	Stock 8,000			Motor Vans 7,000	
	Debtors 7,500			Life Policy 1,100	8,100
	Goodwill 5,000	46,500		By A's Capital	
	To Bank (B/P)	1,100		Warehouse 5,000	
	To A's Capital Rs.			Stock 3,000	8,000
	Mortgage 4,000				
	Creditors 11,700	15,700			

Contd.

Contd.

			1989		Rs.
			April. 1	By B's Capital Retail shop 6,000 Fur. 1,500 Debtors 6,750 Stock 5,000	19,250
				By Loss transferred to : A 2/3rds 7,100 B 1/3rd 3,550	10,650
		63,300			63,300

Illustration 5. A, B and C are partners sharing profits and losses as 2 : 2 : 1. Their Balance Sheet as on 31st March, 1989 was as follows :

Liabilities		Rs.	Assets		Rs.
Creditors		8,000	Bank		10,000
Reserve Fund		10,000	Debtors	8,500	
Capitals :			*Less* Reserve	500	8,000
A	20,000		Stock		10,000
B	8,000		Fixtures		4,000
C	4,000	32,000	Machinery		18,000
		50,000			50,000

On 1st April, 1989 they decided to dissolve the business. The assets were realised as follows : Machinery Rs. 17,000, Fixtures Rs. 3,000, Stock Rs. 15,000 and Debtors Rs. 7,000.

Creditors allowed a discount of 2% and A agreed to bear all realisation expenses. For his service, A was paid Rs. 360. His actual expenses came to Rs. 500 which he was allowed to withdraw from the firm. There was an unrecorded asset of Rs. 1,000 which was taken over by B at Rs. 400.

Show Realisation Account, Bank Account and Partners' Capital Accounts.

Dr. BANK ACCOUNT Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	10,000	Apr. 1	By Realisation A/c (Creditors)	7,840
	To Realisation A/c (Assets)	42,000		By A's Capital A/c (Actual realisation expenses allowed to be withdrawn)	500
				By A's Capital A/c	24,740
				By B's Capital A/c	12,480
				By C's Capital A/c	6,440
		52,000			52,000

REALISATION ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Apr. 1	To Sundrry Assets :		Apr. 1	By Creditors	8,000
	Rs.			By Reserve for Doubtful Debts	500
	Debtors 8,500			By Bank :	
	Stock 10,000			(Assets realised	
	Fixtures 4,000			Rs.	
	Machinery 18,000	40,500		Machinery 17,000	
	To Bank (Creditors - Rs. 8,000 – 2%)	7,840		Fixtures 3,000	
	To A's Capital A/c (For realisation expenses)	360		Stock 15,000	
	To Profit : Rs.			Debtors 7,000	42,000
	A 880			By B's Capital A/c (Unrecorded asset taken over)	400
	B 880				
	C 440	2,200			
		50,900			50,900

CAPITAL ACCOUNTS

Dr.		A	B	C			A	B	Cr. C
1989		Rs.	Rs.	Rs.	1989		Rs.	Rs.	Rs.
Apr. 1	To Realisation A/c (Unrecorded asset)		400		Apr. 1	By Balance b/d.	20,000	8,000	4,000
	To Bank	500				By Reserve Fund	4,000	4,000	2,000
	To Bank	24,740	12,480	6,440		By Realisation	360		
						By Realisation A/c. (Profit)	880	880	440
		25,240	12,880	6,440			25,240	12,880	6,440

Illustration 6. A and B were partners in a business sharing profits and losses in the ratio of 3 : 1 respectively. They decided to dissolve their partnership on 1st April, 1989. On that date, the capitals of A and B were Rs. 10,000 and Rs. 5,000 respectively : the amount owing by A to the firm was Rs. 3,200 and the amount owed by the firm to B was Rs. 4,000 ; the creditors amounted to Rs. 25,000 and cash Rs. 2,700. The assets other than the amount owing by A to the firm realised Rs. 29,600. The expenses of realisation amounted to Rs. 1,500.

Prepare the Balance Sheet of A and B immediately prior to dissolution and the necessary accounts to close the books of the firm :

Solution :

BALANCE SHEET of A and B as on 1st April, 1989

Liabilities		Rs.	Assets	Rs.
Creditors		25,000	Cash	2,700
Loan by B		4,000	Loan to A	3,200
Capitals :	Rs.		Other assets (*Balancing figure*)	38,100
A	10,000			
B	5,000	15,000		
		44,000		44,000

Dr. **REALISATION ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1989			1989		
Apr. 1	To Sundry Assets	38,100	Apr. 1	By Creditors	25,000
	To Cash (Expenses)	1,500		By Cash (Assets realised)	29,600
	To Cash (Creditors paid off)	25,000		By Loss transferred to : Rs. A $\frac{3}{4}$th 7,500 B $\frac{1}{4}$th 2,500	10,000
		64,600			64,600

Dr. **CASH ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1989			1989		
Apr. 1	To Balance b/d	2,700	Apr. 1	By Realisation A/c (Expenses)	1,500
	To Realisation A/c (Assets)	29,600		By Realisation A/c (Creditors)	25,000
	To A's Capital A/c	700		By B's Loan	4,000
				By B's Capital	2,500
		33,000			33,000

Dr. **CAPITAL ACCOUNTS** Cr.

Date	Particulars	A	B	Date	Particulars	A	B
1989				1989			
Apr. 1	To A's Loan	3,200		Apr. 1	By Balance b/d	10,000	5,000
	To Realisation A/c (Loss)	7,500	2,500		By Cash	700	
	To Cash		2,500				
		10,700	5,000			10,700	5,000

Illustration 7. Ashok and Kishore were in partnership sharing profits in the ratio of 3 : 1. They agreed to dissolve the firm on 1st April, 1989. The assets (other than cash of Rs. 2,000) of the firm realised Rs. 1,10,000. The liabilities and other particulars on that date of the firm were as follows :

	Rs.	
Creditors	40,000	
Ashok's Capital	1,00,000	
Kishore's Capital	10,000	(Dr. balance)
Profit and Loss Account	8,000	(Dr. balance)
Realisation expenses were	1,000	

Creditors were settled in full settlement at Rs. 37,000.

Prepare Realisation Account, Cash Account and Partners' Capital Accounts. *(Adapted from Delhi SSCE, 1983)*

Solution :

BALANCE SHEET of ASHOK & KISHORE
as on 1st April, 1989

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Creditors	40,000	Cash	2,000
Ashok's Capital	1,00,000	Kishor's Capital	10,000
		Profit & Loss A/c	8,000
		Sundry Assets (*Balancing figure*)	1,20,000
	1,40,000		1,40,000

LEDGER

REALISATION ACCOUNT

Dr. 1989		Rs.	1989		Cr. Rs.
Apr. 1	To Sundry Assets	1,20,000	Apr. 1	By Creditors	40,000
	To Cash (Creditors)	37,000		By Cash (Assets realised)	1,10,000
	To Cash (Exp.)	1,000		By Loss to :	
				Ashok 6,000	
				Kishore 2,000	8,000
		1,58,000			1,58,000

CASH ACCOUNT

Dr. 1989		Rs.	1989		Cr. Rs.
Apr. 1	To Balance b/d	2,000	Apr. 1	By Realisation A/c (Creditors paid off)	37,000
	To Realisation A/c (Assets realised)	1,10,000		By Realisation A/c (Expenses)	1,000
	To Kisore's Capital A/c.	14,000		By Ashok's Capital A/c.	88,000
		1,26,000			1,26,000

CAPITAL ACCOUNTS

Dr. 1989		Ashok	Kishore	1989		Ashok	Cr. Kishore
Apr. 1	To Blanace b/d		10,000	Apr. 1	By Balance b/d	1,00,000	-
	To Profit & Loss A/c	6,000	2,000		By Cash		14,000
	To Realisation A/c (Loss)	6,000	2,000				
	To Cash	88,000					
		1,00,000	14,000			1,00,000	14,000

Illustration 8. A, B and C commenced business on 1st April, 1987 with capitals of Rs. 25,000, Rs. 20,000 and Rs. 15,000 respectively. Profits and losses were shared in the ratio of 4 : 3 : 3. Capitals carried interest at 15% per annum. During the years ended 31st March, 1988 and 31st March, 1989, they made profits of Rs. 20,000 and Rs. 25,000 (before allowing interest on capitals). Drawings of each partner were Rs. 5,000 per year.

On 1st April, 1989, the firm was dissolved. On that date the creditors of the firm were Rs. 6,000 and cash balance was Rs. 12,000. The assets realised Rs. 60,000 net.

Show the necessary accounts on the date of the dissolution if—

(*a*) the capitals are fixed,

(*b*) the capitals are fluctuating

Interest on Current Accounts and Drawings is to be ignored.

Solution :

First of all, we shall have to ascertain capitals of the partners on 31st March, 1989 in order to be able to prepare Balance Sheet on that date to find out the book value of assets.

Case (*a*) Where the capitals are fixed

Statement for finding out Current Account Balances on 31st March, 1989

	A Rs.	B Rs.	C Rs.
Capital on 1st April, 1987	25,000	20,000	15,000
Interest on Capital @ 15% p.a.	3,750	3,000	2,250
Add Profit [Rs. 20,000 – Rs. 9,000 (*i.e.*, Interest)]	4,400	3,300	3,300
	8,150	6,300	5,550
Less Drawings	5,000	5,000	5,000
Current A/cs Balances on 31st March, 1988	3,150	1,300	550
Add Interest on Capital (@ 15% p.a. on Rs. 25,000, Rs. 20,000 and Rs. 15,000, the Capitals being fixed)	3,750	3,000	2,250
Add Profit [Rs. 25,000 – Rs. 9,000 (*i.e.*, Interest)]	6,400	4,800	4,800
	13,300	9,100	7,600
Less Drawings	5,000	5,000	5,000
Current A/cs Balances on 31st March, 1989	8,300	4,100	2,600

BALANCE SHEET of ASHOK & KISHORE as on 31st March, 1989

Liabilities		Rs.	*Assets*	Rs.
Creditors		6,000	Cash	12,000
Capital Accounts :			Other Assets	
A	25,000		(*Balancing figure*)	69,000
B	20,000			
C	15,000	60,000		

Contd.

Contd.

Current A/cs :	Rs.			
A	8,300			
B	4,100			
C	2,600	15,000		
		81,000		81,000

LEDGER

REALISATION ACCOUNT

Dr.						Cr.
1989		Rs.	1989			Rs.
Apr. 1	To Sundry Assets	69,000	Apr. 1	By Creditors		6,000
	To Cash (Creditors paid off)	6,000		By Cash (Amount realised on sale of assets)		60,000
				By Loss to :	Rs.	
				A	3,600	
				B	2,700	
				C	2,700	9,000
		75,000				75,000

CASH ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	12,000	Apr. 1	By Realisation A/c (Payment to Creditors)	6,000
	To Realisation A/c (Sale proceeds of Assets)	60,000		By A's Capital A/c	29,700
				By B's Capital A/c	21,400
				By C's Capital A/c	14,900
		72,000			72,000

CURRENT ACCOUNTS

Dr.		A	B	C			A	B	C Cr.
1989		Rs.	Rs.	Rs.	1989		Rs.	Rs.	Rs.
Apr. 1	To Realisation A/c. (Loss)	3,600	2,700	2,700	Apr.1	By Balance b/d	8,300	4,100	2,600
	To Capital A/cs (transfer)	4,700	1,400			By Capital A/c (tranfer)			100
		8,300	4,100	2,700			8,300	4,100	2,700

CAPITAL ACCOUNTS

Dr.		A	B	C			A	B	C Cr.
1989		Rs.	Rs.	Rs.	1989		Rs.	Rs.	Rs.
Apr. 1	To Current A/c			100	Apr.1	By Balance b/d	25,000	20,000	15,000
	To Cash A/c	29,700	21,400	14,900		By Current A/c	4,700	1,400	
		29,700	21,400	15,000			29,700	21,400	15,000

Case (*b*) Where the capitals are fluctuating

Statement for finding out Capitals on 31st March, 1989

	A	B	C
	Rs.	Rs.	Rs.
Capital on 1st April, 1987	25,000·00	20,000·00	15,000·00
Add Interest on Capital @ 15% p.a.	3,750·00	3,000·00	2,250·00
Add Profit [Rs. 20,000 – Rs. 9,000 (*i.e.*, Interest)]	4,400.00	3,300.00	3,300.00
	33,150.00	26,300.00	20,550.00
Less Drawings	5,000.00	5,000.00	5,000.00
Capital on 31st March, 1988	28,150.00	21,300.00	15,550.00
Add Interest on Capital @ 15% p.a.	4,222.50	3,195.00	2,332.50
Add Profit [Rs. 25,000 – Rs. 9,750 (*i.e.*, Interest)]	6,100.00	4,575.00	4,575.00
	38,472.50	29,070.00	22,457.50
Less Drawings	5,000.00	5,000.00	5,000.00
Capital on 31st March, 1989	33,472.50	24,070.00	17,457.50

BALANCE SHEET of ASHOK & KISHORE as on 31st March, 1989

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Creditors		6,000	Cash	12,000
Capital Accounts :	Rs.		Other Assets (*Balancing figure*)	69,000
A	33,472.50			
B	24,070.00			
C	17,457.50	75,000		
		81,000		81,000

LEDGER

REALISATION ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Apr. 1	To Sundry Assets	69,000	Apr. 1	By Creditors	6,000
	To Cash (Payment to Creditors)	6,000		By Cash (Sale proceeds of Assets)	60,000
				By Loss to : Rs.	
				A 3,600	
				B 2,700	
				C 2,700	9,000
		75,000			75,000

CASH ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	12,000.00	Apr. 1	By Realisation A/c (Payment to Creditors)	6,000
	To Realisation A/c (Sale proceeds of Assets)	60,000.00		By A's Capital A/c	29,872.50
				By B's Capital A/c	21,370.00
				By C's Capital A//c.	14,757.50
		72,000.00			72,000.00

CAPITAL ACCOUNTS

Dr.		A	B	C			A	B	C Cr.
1989		Rs.	Rs.	Rs.	1989		Rs.	Rs.	Rs.
Apr. 1	To Realisation A/c. (Loss)	3,600.00	2,700.00	2,700.00	Apr. 1	By Balance c/d	33,472.50	24,070.00	17,457.50
	To Cash	29,872.50	21,370.00	14,757.50					
		33,472.50	24,070.00	17,457.50			33,472.50	24,070.00	17,457.50

Unrecorded assets and liabilities

Sometimes at the time of dissolution, there are some assets and liabilities which do not appear in the Balance Sheet. An asset may not appear in the Balance Sheet because it may have been fully written off but physically it may still be present in the business. A liability may not appear in the Balance Sheet because it is either a contingent liability (as for example when a dispute is going on about a workman's compensation) or because its amount is not yet ascertained.

The unrecorded assets and liabilities are dealt with at the time of dissolution as follows :

1. *On sale of unrecorded asset.* Cash Account is debited and Realisation Account is credited. This is a gain from the point of view of business.

2. *On payment of unrecorded liability.* Realisation Account is debited (as this is a loss) and Cash Account is credited.

Illustration 9. A, B and C were partners sharing profits and losses in the ratio of 2 : 2 : 1. On 1st April, 1989, their Balance Sheet was as follows :

Liabilities		Amount	*Assets*		Amount
		Rs.			Rs.
Sundry Creditors		12,000	Cash at Bank		12,200
General Reserves		5,000	Debtors	Rs. 8,000	
Capital Accounts :	Rs.		*Less* Provision	200	7,800
A	15,000		Stock		6,000
B	12,000		Furniture		2,000
C	6,000	33,000	Plant		22,000
		50,000			50,000

The firm was dissolved on that date. The assets realised as under :

	Rs.
Debtors	7,000
Stock	5,000
Furniture	1,000
Buildings	17,000

The Creditors were settled for Rs. 11,000. It was found, however, that there was a liability for Rs. 3,000 for damages which had to be paid. An unrecorded asset realised Rs. 8,000.

The expenses of dissolution amounted to Rs. 1,000.

Give the Realisation Account, the Capital Accounts of the partners and the Bank Account. *(Adapted from All India SSCE, 1979)*

Solution :

LEDGER

Dr. REALISATION ACCOUNT Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Sundry Assets : Rs. Debtors 8,000 Stock 6,000 Furniture 2,000 Buildings 22,000	38,000	Apr. 1	By Sundry Creditors	12,000
	To Bank (Payment to creditors)	11,000		By Provision for Bad Debts	200
	To Bank (Unrecorded liability)	3,000		By Bank (Sale proceeds of Assets) Debtors 7,000 Stock 5,000 Furniture 1,000 Plant 17,000	30,000
	To Cash (Expenses)	1,000		By Bank (Unrecorded asset)	8,000
				By Loss to : Rs. A (2/5) 1,120 B (2/5) 1,120 C (1/5) 560	2,800
		53,000			53,000

Dr. BANK ACCOUNT Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	12,200	Apr. 1	By Bank (Payment to Creditors)	11,000
	To Realisation A/c (Sale proceeds of Assets)	30,000		By Bank (Unrecorded liability)	3,000
	To Realisation A/c (Unrecorded Asset realised)	8,000		By Bank (Expenses)	1,000
				By A's Capital A/c	15,880
				By B's Capital A/c	12,880
				By C's Capital A/c	6,440
		50,200			50,200

Dr. PARTNERS' CAPITAL ACCOUNTS Cr.

1989		A Rs.	B Rs.	C Rs.	1989		A Rs.	B Rs.	C Rs.
Apr. 1	To Realisation A/c. (Loss)	1,120	1,120	560	Apr.1	By Balance b/d	15,000	12,000	6,000
	To Cash (Final Payment)	15,880	12,880	6,440		By General Rreserve	2,000	2,000	1,000
		17,000	14,000	7,000			17,000	14,000	7,000

Illustration 10. A, B and C sharing profits in proportion of 2 : 2 : 1 agreed upon dissolution of their partnership on April 1, 1989, on which date their balance sheet was as under :

Capital Accounts :		Machinery		Rs. 40,000
A	Rs. 40,000	Stock-in-trade		8,000
B	20,000	Investments		20,000
A's Loan	10,000	Joint Life Policy		14,000
Creditors	16,500	Debtors	10,000	
Life Policy Fund	14,000	*Less* Provision for		
Investments Fluctuation		Doubtful Debts	500	9,500
Fund	6,000	Capital A/c—C's		10,000
		Cash at Bank		5,000
	1,06,500			1,06,500

The Joint Life Policy is surrendered for Rs. 10,000. The investments are taken over by A for Rs. 22,500. B takes over all the Stock at Rs. 5,000 and debtors amounting to Rs. 5,000 at Rs. 3,000. Machinery is sold for Rs. 35,000. The remaining debtors realise 50% of book value.

It is found that an investment not recorded in the books is worth Rs. 3,000. The same is taken over by one of the creditors at this value. An unrecorded liability is settled at Rs. 2,000. Outstanding expenses amount to Rs. 2,500. Show the necessary Ledger Accounts on completion of the dissolution of the firm. *(Adapted from All India SSCE, 1982 Comptt.)*

Solution :

LEDGER

REALISATION ACCOUNT

Dr. 1989		Rs.	1989	Cr.	Rs.
Apr. 1	To Sundry Assets : Machinery 40,000 Stock 8,000 Investments 20,000 Joint Life Policy 14,000 Debtors 10,000	92,000	Apr. 1	By Creditors	16,500
	To Bank (Payment to Creditors *Less* Investment taken over : 16,500 − 3,000	13,500		By Provision for Doubtful Debts	500
	To Bank (Unrecorded liability 2,000 Outstanding Expenses 2,500	4,500		By Life Policy Fund	14,000
	To Profit to : A 2,000 B 2,000 C 1,000	5,000		By Investment Fluctuation Fund	6,000
				By Bank (Sale Proceeds of Assets JLP 10,000 Debtors 50% of 5,000 2,500 Machinery 35,000	47,500
				By A's Capital A/c (Investments)	22,500
				By B's Capital A/c (Stock 5,000 Debtors 3,000	8,000
		1,15,000			1,15,000

BANK ACCOUNT

Dr. 1989		Rs.	1989		Cr. Rs.
Apr. 1	To Balance b/d	5,000	Apr. 1	By Realisation A/c (Payment to Creditors)	13,500
	To Realisation A/c (Sale proceeds of Assets)	47,500		By Realisation A/c (Payment of unrecorded liability and Outstanding Expenses)	4,500
	To C's Capital A/c	9,000		By A's Loan	10,000
				By A's Capital A/c	19,500
				By B's Capital A/c	14,000
		61,500			61,500

A's LOAN ACCOUNT

Dr. 1989		Rs.	1989		Cr. Rs.
Apr. 1	To Bank	10,000	Apr. 1	By Balance b/d	10,000

PARTNERS' CAPITAL ACCOUNTS

Dr. 1989		A Rs.	B Rs.	C Rs.	1989		A Rs.	B Rs.	Cr. C Rs.
Apr. 1	To Balance b/d			10,000	Apr. 1	By Balance b/d	40,000	20,000	
	To Realisation A/c (Assets taken over)	22,500	8,000			By Realisation A/c (Profit)	2,000	2,000	1,000
	To Cash	19,500	14,000			By Cash			9,000
		42,000	22,000	10,000			42,000	22,000	10,000

Illustration 11. A, B and C sharing profits 3 : 1 : 1 agreed upon dissolution. They each decide to take over certain assets and liabilities and continue business separately.

BALANCE SHEET as at DISSOLUTION DATE

Liabilities		Amount Rs.	*Assets*		Amount Rs.
Creditors		6,000	Cash		3,200
Loan from C's Wife		1,500	Debtors	Rs. 24,200	
Capitals :	Rs.		*Less* Bad Debts Provision	1,200	23,000
A	27,500		Stocks		7,800
B	10,000		Fixtures		1,000
C	7,000	44,500	Other Assets		17,000
		52,000			52,000

The following is agreed upon :

1. Goodwill is to be ignored.
2. A is to take over all the Fixtures at Rs. 800 ; debtors amounting to Rs. 20,000 at Rs. 17,200 ; the creditors of Rs. 6,000 to be assumed by A at that figure.
3. B is to take over all the stocks at Rs. 7,000 and certain of the sundry assets at Rs. 7,200 (being book values less 10 per cent).
4. C is to take over the remaining sundry assets at 90% of book values less Rs. 100 allowances and assume responsibility for the discharge of the loan together with accruing interest of Rs. 30 which has not been recorded in the books of the firm.
5. The expenses of realisation were Rs. 270. The remaining debtors were sold to a debt collecting agency at 50% of book values.

Prepare the Realisation Account, Partners' Capital Accounts and Cash Account. [*B.Com. (Hons) Delhi 1980*]

Solution :

LEDGER

Dr. REALISATION ACCOUNT Cr.

Dr.		Rs.	Cr.		Rs.
To Sundry Assets :			By Creditors		6,000
Debtors	24,200		By Loan from C's Wife		1,500
Stock	7,800		By Provision for Bad Debts		1,200
Furniture	1,000		By A's Capital A/c (Assets taken over :		
Other Assets	17,000	50,000	Fixtures	800	
To A's Capital A/c (Creditors taken over)		6,000	Debtors	17,200	18,000
To C's Capital A/c (Wife's Loan taken over)		1,530	By B's Capital A/c (Assets taken over :		
To Cash (Expenses)		270	Stock	7,000	
			Sundry Assets	7,200)	14,200
			By C's Capital A/c (Remaining assets taken over : [(90% of Rs. 9,000) — 100]		8,000
			By Cash (50% of Rs. 4,200 collected from debt collecting agency)		2,100
			By Loss to :		
			A (3/5)	Rs. 4,080	
			B (1/5)	1,360	
			C (1/5)	1,360	6,000
		57,800			57,800

Dr.	CASH ACCOUNT		Cr.
	Rs.		Rs.
To Balance b/d	3,200	By Realisation A/c (Expenses)	270
To Realisation A/c (Debtors)	2,100	By A's Capital A/c	11,420
To B's Capital A/c	5,560		
To C's Capital A/c	830		
	11,690		11,690

Dr.	CAPITAL ACCOUNTS						Cr.
	A Rs.	B Rs.	C Rs.		A Rs.	B Rs.	C Rs.
To Realisation A/c (Assets taken over)	18,000	14,200	8,000	By Balance b/d	27,500	10,000	7,000
To Realisation A/c (Loss)	4,080	1,360	1,360	By Realisation A/c (Liabilities taken over)	6,000		1,530
To Cash A/c	11,420			By Cash A/c	—	5,560	830
	33,500	15,560	9,360		33,500	15,560	9,360

Illustration 12. A, B and C were in partnership sharing profits in the ratio of 2 : 2 : 1. The Balance Sheet of the firm as on 31st March, 1989 was as follows :

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Creditors	40,000	Cash		2,150
Bills Payable	16,000	Bank		13,000
Loan from A's Wife	12,000	Investments		20,000
B's Loan	25,000	Joint Life Policy (at Surrender Value)		8,000
Investment Fluctuation Fund	2,000	Stock		42,500
Joint Life Policy Fund	8,000	Debtors	22,700	
Reserve Fund	15,000	*Less* Provision	350	22,350
Capitals : A	80,000	Patent Rights		10,000
B	80,000	Plant		40,000
C	40,000	Building		1,30,000
		Goodwill		30,000
	3,18,000			3,18,000

On 1st April, 1989, the partners decided to dissolve their partnership on the basis of the following terms :

(*a*) Debtors realised Rs. 21,190 ; Stock Rs. 40,100; Plant Rs. 25,000 ; Building Rs. 1,50,000 ; Goodwill nil. Joint Life Policy was surrendered.

(*b*) 50 per cent of the investments were taken over by A at 75 per cent of their book value. The remaining investments were taken up by B at the market value of 110 per cent towards repayment of his loan in part.

(*c*) The firm had previously purchased some shares at Rs. 7,500 in a public limited company and had written them off as worthless. These shares were taken over by C at Rs. 4,000.

(*d*) A creditor for Rs. 10,000 accepted patent rights at a discount of 20 per cent and Rs. 1,000 in cash in satisfaction of his claim. Another creditor for Rs. 10,000 was taken over by B who settled account with him at Rs. 9,500. Remaining creditors were paid at Rs. 19,100.

(*e*) A promised to pay his wife's loan.

(*f*) Bills payable were due on average basis one month after 31st March, 1989. They were paid off on 1st April, 1989 at a discount of 12 per cent p.a.

(*g*) There was one unrecorded asset estimated at Rs. 7,600 half of which was handed over to a creditor (not recorded in books) in settlement of his claim of Rs. 5,000 and the remaining half was sold in the market at Rs. 2,200.

(*h*) B was to look after the dissolution for which he was to be paid Rs. 5,000 subject to the condition that he bore all the realisation expenses which came to Rs. 3,800. The expenses were paid in the first instance by the firm.

Your are required to prepare
(*a*) Realisation Account,
(*b*) Bank Account,
(*c*) Partners' Capital Accounts, and
(*d*) B's Loan Account.

Solution :

Dr. BANK ACCOUNT Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Balance b/d	13,000	Apr. 1	By Realisation A/c (Liabilities paid off)	35,940
	To Cash (balance)	2,150		By Realisation A/c (Unrecorded liability)	1,200
	To Realisation A/c (Sale proceeds of assets)	2,46,490		By B's Capital A/c (Realisation expenses)	3,800
				By B's Loan	14,000
				By A's Capital A/c	82,500
				By B's Capital A/c	89,200
				By C's Capital A/c	35,000
		2,61,640			2,61,640

Dr. **REALISATION ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Sundry Assets : (Investments 20,000; Joint Life Policy 8,000; Stock 42,500; Debtors 22,700; Patent Rights 10,000; Plant 40,000; Building 1,30,000; Goodwill 30,000)	3,03,200	Apr. 1	By Sundry Liabilities : (Creditors 40,000; Bills Payable 16,000; Loan from A's Wife 12,000)	68,000
	To Bank (Creditors for Rs. 10,000 given patent rights and balance in cash 1,000; Other creditors 19,100; Bills Payable 15,840)	35,940		By Provisions (Provision for Debtors 350; Investments Fluctuation Fund 2,000; Joint life Polic Fund 8,000)	10,350
	To B's Capital (Creditor taken over)	10,000		By Bank (Debtors 21,190; Stock 40,100; Plant 25,000; Building 1,50,000; Joint Life Policy 8,000; Unrecorded asset 2,200)	2,46,490
	To A's Capital (His wife's loan)	12,000		By A's Capital (Investment 50% of 20,000 at 75%)	7,500
	To Bank (Unrecorded creditors 5,000; Less unrecorded asset 3,800)	1,200		By C's Loan A/c (Investment 50% of 20,000 at 110%)	11,000
	To B's Capital A/c (Realisation expenses)	5,000		By B's Capital (Shares previously written off)	4,000
				By Loss to : A 8,000; B 8,000; C 4,000	20,000
		3,67,340			3,67,340

Dr. **A's CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (Investments)	7,500	Apr. 1	By Balance b/d	80,000
	To Realisation A/c (Loss)	8,000		By Reserve Fund	6,000
	To Bank	82,500		By Realisation A/c (Wife's loan)	12,000
		98,000			98,000

Dr. **B's CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Bank (Realisation Expenses)	3,800	Apr. 1	By Balance b/d	80,000
	To Realisation A/c (Loss)	8,000		By Reserve Fund	6,000
	To Bank (Balance paid off)	89,200		By Realisation A/c (Creditors)	10,000
				By Realisation A/c (Expenses)	5,000
		1,01,000			1,01,000

Dr. **C's CAPITAL ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c (Shares)	4,000	Apr. 1	By Balance b/d	40,000
	To Realisation A/c (Loss)	4,000		By Reserve Fund	3,000
	To Bank (Balance paid off)	35,000			
		43,000			43,000

Dr. **B's LOAN ACCOUNT** Cr.

1989		Rs.	1989		Rs.
Apr. 1	To Realisation A/c	11,000	Apr. 1	By Balance b/d	25,000
	To Bank (Balance paid off)	14,000			
		25,000			25,000

Illustration 13. A, B and C are partners in a business sharing profits and losses in the ratio of 3 : 2 : 1. Their Balance Sheet as on 31st March, 1989, the date of the dissolution of the firm, was as follows :

Liabilities		Rs.	*Assets*		Rs.
Creditors		35,000	Debtors	40,500	
Bank Overdraft		25,000	*Less* Reserve	500	
General Reserve		24,000			40,000
Profit and Loss A/c		36,000	Stock		20,000
Capitals :	Rs.		Bills Receivable		5,000
A	1,00,000		Plant		55,000
B	50,000		Buildings		2,00,000
C	50,000	2,00,000			
		3,20,000			3,20,000

A agreed to take over the business for a consideration of Rs. 3,80,000. He brought in sufficient cash to pay off to B and C.

Prepare the necessary Ledger Accounts.

Solution :

LEDGER

Dr. REALISATION ACCOUNT Cr.

1989 Mar. 31	To Sundry Assets : Rs. (Debtors 40,500; Stock 20,000; Bills Receivable 5,000; Plant 55,000; Buildings 2,00,000	3,20,500	1989 Mar. 31	By Creditors	35,000
				By Bank Overdraft	25,000
				By Reserve for Bad & Doubtful Debts	500
				By A's Capital A/c (for business taken over—purchase consideration)	3,80,000
	To Profit to : A 60,000; B 40,000; C 20,000	1,20,000			
		4,40,500			4,40,500

Dr. CASH ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To A's Capital A/c	1,90,000	Mar. 31	By B's Capital A/c	1,10,000
				By C's Capital A/c	80,000
		1,90,000			1,90,000

Dr. CAPITAL ACCOUNTS Cr.

		A	B	C			A	B	C
1989		Rs.	Rs.	Rs.	1989		Rs	Rs.	Rs.
Mar. 31	To Realisation A/c (purchase consideration	3,80,000			Mar. 31	By Balance b/d	1,00,000	50,000	50,000
	To Cash A/c		1,10,000	80,000		By General reserve	12,000	8,000	4,000
						By Profit and Loss A/c	18,000	12,000	6,000
						By Realisation A/c (Profit)	60,000	40,000	20,000
						By Cash A/c	1,90,000		
		3,80,000	1,10,000	80,000			3,80,000	1,10,000	80,000

DISSOLUTION BY AMALGAMATION

Sometimes, two or more firms may combine into one for various reasons. Some of these reasons may be :

(*a*) to curtail management expenses ;

(*b*) to effect economies of large-scale production ;

(*c*) to avoid competition ;

(*d*) to exploit consumers by creating monopolies.

The combining firms are called *amalgamating firms* and the new firm which is formed is called *amalgamated firm.* If A & Co. and B & Co. amalgamate and form a new firm styled AB & Co., A & Co. and B & Co. will be called amalgamating firms and AB & Co., amalgamated firm.

In case of amalgamation, the amalgamating firms are dissolved. It is necessary to close the books of the amalgamating firms and open the books of the amalgamated firm. The terms and conditions, regarding revaluation of assets and liabilities, goodwill and the capitals of the partners in the amalgamated firm, are agreed upon between the partners before amalgamation takes place.

Entries in the Books of the Amalgamating Firms

(1) A Profit and Loss Adjustment Account is prepared in the books of each of the firms as usual to adjust the values of assets and liabilities. Any profit or loss as shown by this Account is transferred to Partners' Capital Accounts.

(2) Goodwill Account is raised in the books of each of the firms as agreed.

(3) Assets and liabilities not taken over by the new firm are taken over by the partners in the agreed ratio or they are disposed of.

(4) The capitals of the partners are adjusted according to the terms of the agreement.

(5) After making the above adjustments, an adjusted Balance Sheet is prepared. On the basis of this Balance Sheet, the assets and liabilities including the partners' capitals, are transferred to the new firm by means of the following Journal Entries :

(*a*) New Firm Dr.

To Sundry Assets A/cs

(Being the transfer of assets to new firm)

(*b*) Sundry Liabilities A/cs Dr.
Partners' Capital A/cs Dr.

To New Firm

(Being the transfer of liabilities including capitals of the partners to new firm)

When these two entries are passed, all accounts in the books of the amalgamating firm are closed.

Entries in the Books of the Amalgamated (New) Firm

(*a*) *For taking over assets* :

Sundry Assets A/cs Dr.

To Amalgamating Firm

(Being the amounts of assets taken over from.........on amalgamation)

(*b*) *For taking over liabilities (including the Partners' Capitals)* :

Amalgamating Firm Dr.

To Sundry Liabilities A/cs

To Partners' Capital A/cs

(Being the amounts of the liabilities including partners' capitals taken over from ......on amalgamation)

The above two entries may be combined into one :

Sundry Assets A/cs Dr.

To Sundry Liabilities A/cs

To Partners' Capitals A/cs

(Being the amounts of assets and liabilities taken over from...........on amalgamation)

A combined Balance Sheet of the New Firm may be prepared by adding the respective assets and liabilities.

Illustration 14. AB Bros. and CD Sons are two firms carrying on business independently. They decide to amalgamate their businesses as from 31st March, 1989 under the name and style of AC Co. On that date, their position was as follows :

BALANCE SHEET of AB Bros. as on 31st March, 1989

	Rs.		Rs.
Sundry Creditors	10,800	Cash	4,300
General Reserve	4,200	Investments	5,000
A's Capital	20,000	Stock	7,200
B's Capital	15,000	Sundry Debtors	8,000
		Furniture	4,500
		Vehicles	6,000
		Premises	15,000
	50,000		50,000

BALANCE SHEET of CD Sons as on 31st March, 1989

	Rs.		Rs.
Sundry Creditors	2,000	Bank	1,500
Bills Payable	3,000	Stock	5,000
Capitals :		Sundry Debtors	6,000
C	18,000	Loan to C	3,000
D	7,000	Machinery	10,000
		Patents	4,500
	30,000		30,000

A valuation of the assets of both businesses was made and it was decided that —

(*a*) AB Bros. premises should be appreciated by Rs. 4,000 ; their furniture should be depreciated by 10% and vehicles by 20% and stock should be revalued at Rs. 1,000.

(*b*) The goodwill of AB Bros. was valued at Rs. 12,000 and that of CD Sons at Rs. 8,000.

(*c*) CD Sons' machinery was depreciated by 15%, stock by 10% and patents by Rs. 500.

(*d*) A 5% reserve for doubtful debts was created on all the debtors.

(*e*) AC Co. was not to take over the investments of AB Bros. A and B decided to take over investments equally.

(*f*) C's Loan was to be adjusted against C's Capital.

(*g*) Capital of all the partners in the new firm was to be Rs. 25,000 each, the actual cash to be brought by, or paid to, a partner, as the case may be, before amalgamation.

Give journal entries to close the books of AB Bros. and CD Sons. Open the books of AC Co. and prepare its Balance Sheet.

Solution :

JOURNAL of AB BROS.

1989			Rs.	Rs.
Mar. 31	Profit and Loss Adjustment A/c Dr.		2,050	
	To Furniture A/c			450
	To Vehicles A/c			1,200
	To Reserve for Doubtful Debts A/c			400
	(Being reduction in the value of assets on revaluation and provision of reserve for doubtful debts)			
	Premises A/c Dr.		4,000	
	Stock A/c Dr.		800	
	To Profit and Loss Adjustment A/c			4,800
	(Being appreciation in the value of assets)			
	Profit and Loss Adjustment A/c Dr.		2,750	
	To A's Capital A/c			1,375
	To B's Capital A/c			1,375
	(Being the entry for transfer of Profit on revaluation of assets and liabilities)			
	General Reserve A/c Dr.		4,200	
	To A's Capital A/c			2,100
	To B's Capital A/c			2,100
	(Being the entry for transfer of Reserve to Partners' Capital A/cs)			
	Goodwill A/c Dr.		12,000	
	To A's Capital A/c			6,000
	To B's Capital A/c			6,000
	(Being the entry for raising Goodwill in the books)			

Date	Particulars		L.F.	Rs.	Rs.
1989					
Mar. 31	A's Capital A/c	Dr.		2,500	
	B's Capital A/c	Dr.		2,500	
	To Investments A/c				5,000
	(Being the entry for taking over of investments by A and B)				
	A's Capital A/c	Dr.		1,975	
	To Cash A/c				1,975
	(Being the entry for amount withdrawn by A to bring down his capital to Rs. 25,000)				
	Cash A/c	Dr.		3,025	
	To B's Capital A/c				3,025
	(Being the entry for amount brought in by B to raise his capital to Rs. 25,000)				
	AC Co.	Dr.		61,200	
	To Cash A/c				5,350
	To Stock A/c				8,000
	To Sundry Debtors				8,000
	To Furniture A/c				4,050
	To Vehicles A/c				4,800
	To Premises A/c				19,000
	To Goodwill A/c				12,000
	(Being the entry for transfer of assets to AC Co.)				
	Sundry Creditors	Dr.		10,800	
	Reserve for Doubtful Debts A/c	Dr.		400	
	A's Capital A/c	Dr.		25,000	
	B's Capital A/c	Dr.		25,000	
	To AC Co.				61,200
	(Being the entry for transfer of liabilities to AC co.)				

JOURNAL of CD SONS

Date	Particulars		L.F.	Rs.	Rs.
1989					
Mar. 31	Profit and Loss Adjustment A/c	Dr.		2,800	
	To Machinery A/c				1,500
	To Stock A/c				500
	To Patents A/c				500
	To Reserve for Doubtful Debts A/c				300
	(Being the entry for reduction in the value of assets)				

Date	Particulars		L.F.	Rs.	Rs.
1989				Rs.	Rs.
Mar. 31	C's Capital A/c	Dr.		1,400	
	D's Capital A/c	Dr.		1,400	
	To Profit and Loss Adjustment A/c				2,800
	(Being the entry for transfer of loss on revaluation of assets)				
	Goodwill A/c	Dr.		8,000	
	To C's Capital A/c				4,000
	To D's Capital A/c				4,000
	(Being the entry for raising of goodwill in the books)				
	C's Capital A/c	Dr.		3,000	
	To C's Loan A/ct				3,000
	(Being transfer of C's Loan to his Capital A/c)				
	Bank A/c	Dr.		19,800	
	To C's Capital A/c				4,400
	To D's Capital A/c				15,400
	(Being the amounts brought in by C and D to raise Capitals to Rs. 25,000)				
	AC Co.	Dr.		55,300	
	To Bank				24,300
	To Stock A/c				4,500
	To Sundry Debtors				6,000
	To Machinery A/c				8,500
	To Patents A/c				4,000
	To Goodwill A/c				8,000
	(Being the entry for transfer of assets to AC Co.)				
	Sundry Creditors	Dr.		2,000	
	Bills Payable A/c	Dr.		3,000	
	Reserve for Doubtful Debts A/c	Dr.		300	
	C's Capital A/c	Dr.		25,000	
	D's Capital A/c	Dr.		25,000	
	To AC Co.				55,300
	(Being transfer of liabilities including Capitals of A and B to AC Co.)				

JOURNAL of AC Co.

Date	Particulars		L.F.	Rs.	Rs.
1989					
Mar. 31	Cash A/c	Dr.		5,350	
	Stock A/c	Dr.		8,000	
	Sundry Debtors	Dr.		8,000	
	Furniture A/c	Dr.		4,050	
	Vehicles A/c	Dr.		4,800	
	Premises A/c	Dr.		19,000	
	Goodwill A/c	Dr.		12,000	
	To AB Bros.				61,200
	(Being the entry for taking over assets of AB Bros. at agreed values on amalgamation)				
	AB Bros.	Dr.		61,200	
	To Sundry Creditors				10,800
	To Reserve for Doubtful Debts A/c				400
	To A's Capital A/c				25,000
	To B's Capital A/c				25,000
	(Being the entry for taking over liabilities including Capitals of A and B)				
	Bank A/c	Dr.		24,300	
	Stock A/c	Dr.		4,500	
	Sundry Debtors	Dr.		6,000	
	Machinery A/c	Dr.		8,500	
	Patents A/c	Dr.		4,000	
	Goodwill A/c	Dr.		8,000	
	To CD Sons				55,300
	(Being the entry for taking over assets of CD Sons at agreed values on amalgamation)				
	CD Sons	Dr.		55,300	
	To Sundry Creditors				2,000
	To Bills Payable A/c				3,000
	To Reserve for Doubtful Debts A/c				300
	To C's Capital A/c				25,000
	To D's Capital A/c				25,000
	(Being the entry for taking over liabilities including Capitals of C and D)				

The last two entries both in the books of AB Bros. and CD Sons for transfer of assets, liabilities and capitals to AC Co. may be combined into one.

Likewise the entries in the books of AC Co. for taking over assets, liabilities and capitals of AB Bros. and CD Sons may be combined into one.

BALANCE SHEET of AC Co.
as on 31st March, 1989

Liabilities		Amount Rs.	Assets		Amount Rs.
Sundry Creditors		12,800	Cash		5,350
Bills Payable		3,000	Bank		24,300
Capitals :			Sundry Debtors	14,000	
A	25,000		*Less* Reserve		700
B	25,000			——	13,300
C	25,000		Stock		12,500
D	25,000		Patents	4,000	
	——	1,00,000	Furniture		4,050
			Vehicles		4,800
			Machinery		8,500
			Premises		19,000
			Goodwill		20,000
		1,15,800			1,15,800

TEST QUESTIONS

1. What do you understand by dissolution of a firm ? Is there any difference between 'dissolution of partnership' and 'dissolution of firm' ?

2. When is a firm dissolved by Court ?

3. In what order are the liabilities of a firm, when dissolved, paid ?

4. What is Realisation Account ? When and how is it prepared ?

5. Point out the distinction between 'Realization Account' and 'Revaluation Account'. State the purposes for which these accounts are made.
(All India SSCE, 1989 ; Delhi SSCE, 1987)

6. Explain the meaning of Realization Account and Revaluation (Profit and Loss Adjustment) Account of a partnership firm.

7. How are the books of a firm closed after the dissolution of a firm ?

8. What entries are made in books of account when the business of a firm is taken over by one of the partners ?

9. How are unrecorded assets and liabilities dealt with in books of account when a firm is dissolved ?

10. What entries will be passed at the time of dissolution of a firm in the following case ?

A, a partner, agrees to look after dissolution for a service charge of Rs. 1,000. His actual expenses come to Rs. 1,200 which he wants the firm to pay on his account.

PRACTICAL EXERCISES—I

1. Young and Old are in partnership sharing profits and losses in the ratio of 5 : 3 respectively. They agree to dissolve the partnership business on 31st March, 1989 when the Balance Sheet of the firm was as follows :

BALANCE SHEET as on 31st March, 1989

Liabilities	Rs.	*Assets*	Rs.
Capitals : Young	3,000	Furniture	2,400
Old	2,600	Stock	2,800
Creditors	3,000	Debtors	2,200
		Cash	1,200
	8,600		8,600

The assets other than Cash realised Rs. 9,000. The Creditors were paid off at Rs. 2,760. Expenses of realisation amounted to Rs. 240.

Close the books of the firm and show the Realisation Account, Creditors Account, Cash Account and the Capital Accounts.

(*Ans.* Profit on Realisation Rs. 1,600). Young receives Rs. 4,000 ; Old receives Rs. 3,200).

2. A, B and C decided to dissolve their partnership firm. Their position as on 31st March, 1989, the date of dissolution, was as follows :

BALANCE SHEET as on 31st March 1989

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Creditors		2,75,000	Furniture	5,000
A's Loan		30,000	Stock	1,75,000
Capital Accounts :			Debtors	2,40,000
A	Rs. 1,00,000		Bills Receivable	30,000
B	Rs. 50,000		Cash	10,000
C	Rs. 5,000	1,55,000		
		4,60,000		4,60,000

They shared profits and losses in the ratio of 5 : 3 : 2.

Rs. 20,000 of the debtors proved bad. The bills receivable were received in full ; the stock realised Rs. 1,70,000. Furniture was taken over by B at book value and the expenses of realisation amounted to Rs. 5,000.

Close the books of the firm. (*Adapted from Delhi SSCE, 1980*)

(*Ans.* Loss on Realisation Rs. 30,000. A receives Rs. 85,000 ; B receives Rs. 36,000. C brings in Rs. 1,000).

3. A, B and C are in partnership, sharing profits and losses in the ratio of 5, 3 and 2 respectively. They dissolved partnership on 31st March, 1989 when their Balance Sheet stood as follows :

BALANCE SHEET as on 31st March, 1989

Liabilities	Rs.	*Assets*		Rs.
Sundry Creditors	1,460	Balance at Bank		218
Bills Payable	2,540	Investments		1,000
B's Loan	2,000		Rs.	
Capitals :		Debtors	2,800	
A	2,500	*Less* Reserve	150	
B	1,500			2,650
C	1,000	Stock		1,912
Current Accounts :		Machinery		1,500
A	120	Buildings		4,000
B	73			
C	87			
	11,280			11,280

The assets realised as follows :

Buildings Rs. 3,500 ; Investments Rs. 900 ; Sundry Debtors Rs. 2,350 ; Stock Rs. 1,500 ; Machinery was taken over by A at Rs. 1,112. Expenses of realisation amounted to Rs. 100. Creditors accepted Rs. 1,360 in full settlement of their account.

Close the books of the firm showing the necessary Ledger Accounts.

(*Ans.* Loss on Realisation Rs. 1,700. A, B and C receive Rs. 658, Rs. 1,063 and Rs. 747 respectively).

4. J and M are equal partners in a retail store. On 31st March, 1989, they decided to dissolve the firm. On that date, their financial position was as under :

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Sundry Creditors		900	Cash at Bank	1,000
Capitals :			Sundry Debtors	1,900
J	Rs. 6,000		Stock	5,000
M	4,000	10,000	Fixtures and Fittings	1,000
			Lease	2,000
		10,900		10,900

Lease realised Rs. 3,000 ; Fixtures and Fittings Rs. 1,100 ; and Stock was sold at Rs. 4,600 ; Debtors paid only Rs. 1,800. A sum of Rs. 860 was paid to creditors in full settlement. Expenses of realisation amounted to Rs. 80.

Prepare necessary Ledger Accounts to close the books of the firm.

[*Adapted from Delhi SSC (Comptt.) 1980*]

(*Ans.* Profit on Realisation Rs. 560. J receives Rs. 6,280 and M receives Rs. 4,280).

5. A, B and C are partners sharing profits and losses in the ratio of 3 : 2 : 1. They dissolved their partnership on 31st March, 1989 when their position was as follows :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Capitals :		Loss on Realisation	6,000
A	10,000	C's Capital	14,000
B	10,000		
	20,000		20,000

Close the books of the firm.

(*Ans.* A receives Rs. 7,000 and B receives Rs. 8,000. C brings in Rs. 15,000).

6. A, B and C are in partnership sharing profits and losses in the proportion of 4 : 3 : 2. Their Balance Sheet on 31st March, 1989 stood as follows :

Liabilities		Amount Rs.	Assets	Amount Rs.
Capital Accounts :			Land and Building	25,500
A	Rs. 24,000		Stock-in-trade	22,000
B	Rs. 22,000		Debtors	21,000
C	Rs. 20,500	66,500	Cash in Hand	21,500
Creditors		23,500		
		90,000		90,000

They agree to dissolve partnership as from 31st March, 1989. A agrees to take over the stock at Rs. 21,500 and the debtors at Rs. 17,000 (no cash passes). The land and buildings are sold at an auction for Rs. 22,700. Creditors accept Rs. 20,000 in full settlement. Expenses of dissolution are Rs. 700.

Draw up the necessary Ledger Accounts to close the books of the firm.

(*Ans.* Loss on Realisation Rs. 4,500. A brings in Rs. 16,500 and B receives Rs. 20,500 and C receives Rs. 19,500).

7. A, B and C are partners sharing profits and losses in the ratio of 3 : 2 : 1. On 1st April, 1989 they decided to dissolve partnership. Their position on that date was as follows :

Liabilities		Amount Rs.	Assets	Amount Rs.
Creditors		51,400	Cash at Bank	3,700
Joint Life Policy Reserve		9,000	Stock	20,100
Reserve Fund		12,000	Debtors	62,600
Capital Accounts :			Investments	16,000
A	Rs. 30,000		Furniture	6,500
B	Rs. 20,000		Buildings	23,500
C	Rs. 10,000	60,000		
		1,32,400		1,32,400

Rs. 1,19,500 were realised from all assets except Cash at Bank and Investments. Creditors were fully paid. The cost of winding up came to Rs. 1,200. Investments were taken over by A at Rs. 20,000.

Prepare the Realisation Account and the Capital Accounts of partners.

(*Adapted from Delhi SSCE, 1979*)

(*Ans.* Profit on Realisation Rs. 9,600. A, B and C receive Rs. 25,300, Rs. 30,200 and Rs. 15,100 respectively)

8. X and Y sharing profits and losses in the ratio of 2 : 1 respectively dissolve their partnership on 31st March, 1989 when their Balance Sheet stood as follows :

Liabilities		Rs.	*Assets*	Rs.
Bill Payable	1,500		Cash in Hand	725
Creditors	2,025		Sundry Debtors	1,200
		3,525	Bills Receivable	1,000
X's Capital	5,000		Stock	5,000
Y's Capital	3,000	8,000	Machinery	3,000
			Furniture	600
		11,525		11,525

Sundry Debtors and Bills Receivable realised in full except a debtor for Rs. 75 who is insolvent. Stock realised Rs. 5,500 ; Machinery Rs. 2,850 ; Furniture Rs. 650. The cost of realisation was Rs. 80. One quarter's tax amounting Rs. 35 was due and had to be paid.

Give Realisation Account, Cash Account and Partners' Capital Accounts. (*H.S.*)

(*Ans.* Profit on Realisation Rs. 210. X receives Rs. 5,140 ; Y receives Rs. 3,070)

9. A and B who were in partnership sharing profits and losses in the proportion of 4/7ths and 3/7ths respectively decided to dissolve partnership as on 31st March, 1989. At the date of the dissolution A's Capital was Rs. 1,25,030 and B's Rs. 2,070 ; the creditors amounted to Rs. 23,150 and cash Rs. 4,520. The remaining assets realized Rs. 1,24,910 and the expenses of dissolution were Rs. 1,860.

Prepare the Balance Sheet as on the date of dissolution and the accounts necessary to close the books of the firm, showing the final adjustment of cash between the partners. (*H.S.*)

(*Ans.* Balance Sheet Total Rs. 1,50,250 ; Loss on Realisation Rs. 22,680 ; A receives Rs. 1,12,070 ; B bring in Rs. 7,650).

10. A, B and C entered into a partnership and contributed Rs. 9,000, Rs. 6,000 and Rs. 3,000 respectively. They agreed to share profits and losses equally. The business lost heavily during the very first year and they decided to dissolve the firm. After realising all assets and paying off liabilities, there remained a cash balance of Rs. 6,000.

Prepare a Journal entry to distribute the cash among the partners.

(*Ans.* Loss on Realisation Rs. 12,000. A receives 5,000 ; B receives Rs. 2,000 ; C brings in Rs. 1,000).

11. X and Y dissolve their partnership. Their position as at 31st March, 1989 was as follows :

	Rs.
X's Capital	25,000
Y's Capital	15,000
Sundry Creditors	20,000
Cash in Hand and at Bank	750

The balance of X's Loan account to the firm stood at Rs. 10,000. The realisation expenses amounted to Rs. 350. Stock realised Rs. 20,000 and Debtors Rs. 25,000. Y took a machine at the agreed valuation of Rs. 7,500. Other fixed assets realised Rs. 20,000.

You are required to close the books of the firm.

(*Ans.* Profit on Realisation Rs. 2,900. X receives Rs. 26,450. Y receives Rs. 8,950).

12. The partnership of A, B and C came to an end on 31st March, 1989. The Capital of A and B was Rs. 4,500 each while C's account was overdrawn to the extent of Rs. 500. Profits and losses were shared in the proportion 3 : 2 : 1. Their assets amounted to Rs. 8,870, and their liabilities to Rs. 370. The business was sold for Rs. 10,000. Expenses were Rs. 20.

Show the partners' accounts after the sale had been effected.

(*Ans.* Profit on Realisation Rs. 1,110. A receives Rs. 5,055 ; B receives Rs. 4,870. C brings in Rs. 315).

13. Sachin and Tarun were partners sharing profits and losses as to 2/3rds and 1/3rd respectively. On 31st March, 1989 they dissolved the partnership firm when their books showed the following ledger account balances :

Investments Rs. 9,500 ; Furniture Rs. 2,700 ; Goodwill Rs. 10,000 ; Bank overdraft Rs. 3,800 ; Closing Stock Rs. 16,000 ; Sundry debtors Rs. 10,300 ; Trade creditors Rs. 14,700 ; Sachin's capital Rs. 20,000 and Tarun's capital Rs. 10,000.

Sachin agreed to bear all realisation expenses. For this service he was to be paid Rs. 500.

The firm could realise only Rs. 9,400 of sundry debtors and 75% of the book value of the stock. Furniture was sold for Rs. 1,600 but nothing could be realised for the goodwill account. Sachin took over investments for Rs. 11,000.

You are required to prepare Realisation Account.

(*Adapted from Delhi SSCE, 1985*)

(*Ans.* Loss on Realisation Rs. 15,000. Sachin brings in Rs. 500 and Tarun receives Rs. 5,000).

14. Sharma, Verma and Gupta were partners sharing profits in the ratio of 3 : 2 : 1 respectively. Their Balance Sheet on 31st March, 1989 stood as follows :

Liabilities	Rs.	*Assets*	Rs.
Sundry Creditors	23,000	Cash	1,000
Loan	20,000	Stock	25,000
Sharma's Capital	6,000	Debtors	18,000
Verma's Capital	5,000	Furniture	5,000
Gupta's Capital	3,000	Machinery	8,000
	57,000		57,000

The firm was dissolved on 31st March, 1989. The fixed assets realised Rs. 2,000 whereas Stock and Debtors realised Rs. 33,000 in all. Interest on loan @ 15% p.a. is outstanding for six months. An unrecorded asset realises Rs. 5,100. The expenses on dissolution were Rs. 600.

Prepare the necessary Ledger Accounts, assuming that the necessary cash has been brought in by the partners. (*Adapted from Delhi SSCE 1987*)

(*Ans.* Loss on Realisation Rs. 18,000. Sharma brings in Rs. 3,000, and Verma brings in Rs. 1,000).

15. The Balance Sheet of A, B and C on 31st March, 1989 is given on the next page :

The firm was dissolved on 31st March, 1989. For the purpose of dissolution, the Investments were valued at Rs. 18,000 and Stock at Rs. 17,500. A agreed to take over Investments and B to take over Stock. C took over the Furniture at book value. Debtors and Building realised Rs. 57,000 and Rs. 1,25,000 respectively. Expenses of realisation amounted to Rs. 1,200. Creditors allowed a discount of 2·5 per cent.

In addition, one bill for Rs. 500 under discount was dishonoured and had to be taken up by the firm.

BALANCE SHEET of A, B and C

Liabilities		Rs.	Assets		Rs.
Creditors		40,000	Cash		10,500
Reserve Fund		30,000	Investments		20,000
Capitals :			Stock		25,000
A	Rs. 60,000		Debtors	60,000	
B	Rs. 50,000		*Less* Reserve	500	
C	Rs. 40,000				59,500
		1,50,000	Furniture		5,000
			Building		1,00,000
		2,20,000			2,20,000

Prepare the necessary Ledger Accounts to close the books of the firm.

(*Adapted from All India SSCE, 1980*)

(*Ans.* Profit on Realisation Rs. 12,000. A, B and C receive Rs. 56,000, Rs. 46,500 and Rs. 49,000 respectively).

16. The following is the Balance Sheet of A and B as at 31st March, 1989. The profit sharing ratios of the partners are 2 : 3.

Liabilities		Rs.	Assets		Rs.
Creditors		97,500	Land and Building		30,000
Capital Accounts :			Motors Vehicles		18,300
A	85,000		Stock		72,800
B	63,000		Debtors	Rs. 1,13,200	
		1,48,000	*Less* Provision for Bad Debts	2,450	
					1,10,750
			Bank		10,000
			Cash		3,650
		2,45,500			2,45,500

The partners decided to dissolve the firm on and from the date of the Balance Sheet. Motor Vehicles and Stock were sold for cash at Rs. 16,950 and Rs. 77,600 respectively and all Debtors were realized in full. A took over Land and Building at an agreed valuation of Rs. 43,500. Creditors were paid off subject to discount amounting to Rs. 1,700. Expenses of realization were Rs. 1,250. Rent for the last three months was outstanding. Monthly rental is Rs. 1,500.

Prepare Realization Account, Cash Account, Sundry Creditors' Account, and Partners' Capital Accounts' to close the books of the firm as a result of its dissolution.

(*Adapted from Delhi SSCE, 1981*)

(*Ans.* Profit on Realisation Rs. 15,350. A receives Rs. 47,640 and B receives Rs. 72,210).

17. A, B and C carrying on business and sharing profits in the ratio of 3 : 2 : 1 respectively, agreed to dissolve their partnership firm on 31st March, 1989. The Balance Sheet of the firm as on that date was as follows :

Liabilities	Rs.	*Assets*	Rs.
Creditors	88,000	Machinery	1,00,000
Capital Accounts :		Stock	60,000
A	1,00,000	Debtors	78,000
B	10,000	Cash at Bank	32,000
C	72,000		
	2,70,000		2,70,000

A agreed to take over Machinery at an agreed value of Rs. 80,000. A sum of Rs. 63,000 could be realised from debtors and a part of stock was sold for Rs. 26,000. The creditors were satisfied by a cash payment of Rs. 64,000 and remaining stock valued at Rs. 20,000. Expenses of dissolution amounted to Rs. 3,000. Draw up a Realisation Account, Bank Account and Partners' Capital Accounts. *(Adapted from Delhi SSCE, 1988)*

(*Ans.* Loss on Realisation Rs. 48,000. A and B bring in Rs. 4,000 and Rs. 6,000 respectively. C receives Rs. 64,000.

18. A, B and C were in partnership as Coal Merchants sharing profits and losses in the ratio of 3 : 2 : 1 respectively. On 31st March, 1989 their Balance Sheet showed the following position of affairs :

BALANCE SHEET as on 31st March, 1989

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Sundry Creditors		3,00,000	Cash at Bank	1,50,000
Mortgage on Property		40,000	Sundry Debtors	4,00,000
Capital Account :			Stock	1,50,000
	Rs.		Horses and Carts	50,000
A	2,50,000		Freehold Property	1,00,000
B	1,50,000		C's Current Account	1,40,000
C	1,00,000			
		5,00,000		
Current Accounts :				
A		1,00,000		
B		50,000		
		9,90,000		9,90,000

It was decided to dissolve the partnership as at the date of the above Balance Sheet. The Freehold Property realised Rs. 1,08,000. Bad Debts and discounts allowed amounted to Rs. 50,000. The Horses and Carts realised Rs. 35,000. The Mortgage on Property was duly paid off. The creditors were paid, less discount which amounted to Rs. 10,000, and Stock which they agreed to take at Rs. 1,20,000. The costs of realisation amounted to Rs. 30,000. An unrecorded asset valued at Rs. 50,000 realised Rs. 45,000. Another unrecorded asset valued at Rs. 32,000 was agreed to be taken over by A. Outstanding expenses on this day were Rs. 18,000.

Write up the Realisation Account and the Capital and Drawings Accounts of the partners, and close the books of the firm.

(*Ans.* Loss on Realisation Rs. 48,000. A and B receive Rs. 2,94,000 and Rs. 1,84,000. C brings in Rs. 48,000).

19. The Balance Sheet of X, Y and Z who were sharing profits as 3/5ths, 1/5th and 1/5th stood as follows on 31st March, 1989 *i.e.*, the date of dissolution :

BALANCE SHEET as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Bank Overdraft	60,000	Cash at Office	1,000
Sundry Creditors	45,000	Bills Receivable	4,000
X's Capital	15,000	Debtors	25,000
Z's Capital	10,000	Stock	40,000
		Plant	30,000
		Goodwill	10,000
		Y's Capital	20,000
	1,30,000		1,30,000

The assets realised Rs. 79,750 and after paying Rs. 2,000 for realisation expenses, the creditors were paid off whatever the resources of the firm permitted.

Show the final adjustment amongst the partners, assuming that nothing is recovered from their private estate.

[*Ans.* Loss on Realisation Rs. 5,000. Creditors and Bank receive Rs. 78,750, *i.e.*, 75 P. in a rupee. The Capital Account of Y (Dr. Balance Rs. 21,000) is closed by transfer to Capital Accounts of X (Cr. Balance Rs. 12,000) and Z (Cr. Balance Rs. 9,000)].

20. A, B and C are partners in a business sharing profits and losses in the ratio of 2 : 1 : 1. On 31st March, 1989, they decide to wind up their business, when their Balance Sheet is as follows :

BALANCE SHEET of A, B and C as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Bills Payable	843	Bank	11,142
Sundry Creditors	3,237	Bills Receivable	568
A's Capital	20,238	Debtors	3,800
B's Capital	10,119	Stock	11,614
C's Capital	8,000	Furniture	313
		Property	15,000
	42,437		42,437

Creditors for Bills Payable agree to accept Bills Receivable in addition to Rs. 100 cash. Half the debtors realise full amount, the other half are taken over by A at book value less 10%. Stock realises Rs. 10,500. Furniture is taken over by B at Rs. 63. Property is taken over by C at Rs. 18,000. Expenses of realisation amount to Rs. 421.

Show necessary Accounts in Ledger.

(*Ans.* Profit on Realisation Rs. 1,200. A receives Rs. 19,128 ; B receives Rs. 10,356. C brings in Rs. 9,700).

21. Ram Bros. and Sham Bros. are two firms carrying on business separately. They decided to amalgamate their businesses with effect from 1st April, 1989.

On that date their financial position was as follows :

BALANCE SHEET of RAM BROS.

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Bank Overdraft	9,000	Plant and Machinery		27,000
Sundry Creditors	3,500	Equipment		11,000
Capitals :		Stock		38,000
Ram Lall	60,000	Investments		5,000
Ram Chand	40,000		Rs.	
		Sundry Debtors	25,000	
		Less Reserve	500	
				24,500
		Cash		7,000
	1,12,500			1,12,500

BALANCE SHEET of SHAM BROS.

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Bills Payable	5,000	Goodwill	30,000
Sundry Creditors	20,000	Freehold Premises	25,000
Capitals :		Machinery	50,000
Sham Lall	90,000	Furniture	2,000
Sham Chand	60,000	Stock	26,000
		Sundry Debtors	14,000
		Bank	10,000
		Cash	18,000
	1,75,000		1,75,000

A joint valuation of the assets of both businesses was made, and it was agreed that—

(*a*) Ram Bros. should appreciate their plant and machinery by Rs. 1,000 ; the provision for bad debts should be raised to 5 per cent of the debtors ; the investments should be taken by the two partners equally ; the overdraft should be paid off by the two partners equally ; the goodwill of the firm should be fixed at Rs. 10,000.

(*b*) Sham Bros. should appreciate their premises by Rs. 10,000 ; their machinery should be depreciated by 20 per cent ; their stock should be reduced by Rs. 1000 ; and that they should create a provision for doubtful debts at 5 per cent of their debtors ; and that goodwill should be revalued at Rs. 16,000.

Pass the necessary entries to close the books of the amalgamating firms and open the books of the amalgamated firm. Also give the Balance Sheet of the amalgamated firm.

(*Ans.* Balance Sheet of amalgamated firm Rs. 3,07,050).

PRACTICAL EXERCISES—II

1. A, B and C were in partnership sharing profits and losses in the ratio of 3 : 2 : 1 respectively. On 31st March, 1989 they decided to dissolve the partnership and the position of the firm on this date was represented by the following Balance Sheet :

BALANCE SHEET as on 31st March, 1989

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Creditors	40,000	Building	57,000
Loan Account—A	10,000	Stock	50,000
Capital Accounts :		Debtors	50,000
A	60,000	Cash at Bank	3,000
B	40,000		
C	10,000		
	1,60,000		1,60,000

During the course of realisation a liability under a suit for damages was settled at Rs. 20,000 as against Rs. 5,000 only provided for in the books of the firm.

Buildings were sold for Rs. 30,000 and the Stock and Sundry Debtors realized Rs. 30,000 and Rs. 42,000 respectively. Goodwill of the firm realised Rs, 10,000. The expenses of realization amounted to Rs. 1,200.

You are required to close the books of the firm showing the necessary Ledger Accounts.

(*Ans.* Loss on Realisation Rs. 61,200. A receives Rs. 29,400 ; B receives Rs. 19,600 ; C brings in Rs. 200).

2. Dipali and Rajshri are partners in a firm sharing profits and losses in the ratio of 3 : 2. They decided to dissolve their firm on 31st March, 1989 when their Balance Sheet was as under :

BALANCE SHEET of DIPALI and RAJSHRI

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Capitals :		Freehold Property	16,000
Dipali Rs. 17,500		Investments	4,000
Rajshri Rs. 10,000	27,500	Sundry Debtors	2,000
Sundry Creditors	2,000	Stock	3,000
Profit and Loss Account	1,500	Bank	2,000
		Cash	4,000
	31,000		31,000

The Partners decide to dissolve the firm on the above date. Dipali took over the investments at an agreed value of Rs. 3,800. Other assets were realised as follows :

Freehold Property ; Rs. 18,000 ; Sundry Debtors Rs. 1,800 ; Stock Rs. 2,800.

Creditors of the firm agreed to accept 5% less. Expenses of realisation of assets amounted to Rs. 500. A typewriter in the firm, which was bought out of the firm's money, was not shown in the above Balance Sheet. The typewriter is now sold for Rs. 2,000.

Close the firm's books by preparing a Realisation Account, Partners' Capital Accounts, and Bank Account. *(Adapted from Delhi SSCE, 1986)*

(*Ans.* Profit on Realisation Rs. 3,000. Dipali receives Rs. 16,400 and Rajshri receives Rs. 11,800).

3. A and B were in partnership sharing profits in the ratio of 3 : 1. They agreed to dissolve the firm. The assets, apart from cash Rs. 10,000, realised Rs. 2,50,000. The liabilities of the firm were as follows :

Creditors Rs. 90,000 ; Loan from A Rs. 40,000 ; A's Capital Rs. 70,000, and B's Capital Rs. 80,000.

Show by means of accounts the distribution of cash realised.

(*Ans.* Assets on date of dissolution Rs. 2,70,000. Loss on Realisation Rs. 20,000. A receives Rs. 55,000 and B receives Rs. 75,000).

4. A and B were in partnership, sharing profits as to 4/5ths and 1/5th respectively. They agreed to dissolve partnership as on March, 31, 1989.

A Balance Sheet was prepared as on this date when the assets other than cash stood at Rs. 39,750. The liabilities on the same date were as follows : Loan from Bankers and Interest Rs. 5,400; Sundry Trade Creditors Rs. 12,100 ; Reserve Account Rs. 2,250 ; Capital Accounts : A Rs. 10,000, B Rs. 2,000 ; Loan Accounts—A Rs. 7,000, B Rs. 2,000.

The assets realized Rs. 36,450, the cost of realization being Rs. 754. Discounts amounting to Rs. 374 were allowed by Sundry Creditors on the sums due to them.

Prepare the accounts necessary to show the result of the dissolution.

(*Ans.* Cash Balance on 31st March 1989 Rs. 1,000. Loss on Realisation Rs. 3,680). A receives Rs. 8,856 ; B receives Rs. 1,714).

5. A, B and C entered into partnership on 1st April, 1987. They contributed capital Rs. 40,000, Rs. 30,000 and Rs. 20,000 respectively and agreed to share profits and losses in the ratio of 3 : 2 : 1. Interest on capital was to be allowed at 15 per cent per annum and interest on drawings was to be charged at an average rate of 5 per cent. During the two years ending 31st March, 1989 the firm made profits of Rs. 21,600 and Rs. 25,140 respectively before allowing or charing interest on capital and drawings. The drawings of each partner were Rs. 6,000 per year.

On 31st March 1989, the partners decided to dissolve the partnership due to difference of opinion. On that date the creditors amounted to Rs. 20,000. The assets, other than cash Rs. 2,000, realised Rs. 1,21,000. Expenses of realisation amounted to Rs. 790.

Draw up the necessary ledger accounts to close the books of the firm. The Capitals are fixed.

(*Ans.* Capitals on 31st March, 1989 : A Rs. 50,530, B Rs. 33,550, C Rs. 16,630. Assets on 31st March, 1989 Rs. 1,18,710. Profit on Realisation Rs. 1,500. A, B and C receive Rs. 51,280, Rs. 34,050 and Rs. 16,880 respectively.

6. A, B and C were in partnership sharing profits as 7 : 2 : 1 and the Balance Sheet of the firm as on 31st March, 1989 was as under :

Liabilities	Amount Rs.	Assets	Amount Rs.
Capital Accounts :		Furniture	2,000
A	1,241	Plant	3,122
B	865	10 shares in X Ltd. at cost	240
C	8,462	100 shares in Y Ltd.	1,000
Creditors	1,121	Stock	2,124
Reserve Fund	2,000	Debtors	874
		Bank	521
		Patents	3,808
	13,689		13,689

It was agreed to dissolve the firm as on 31st March, 1989 and the terms of the dissolution were :

(*a*) A to take over the Furniture at an agreed figure of Rs. 3,150.

(*b*) B who was to carry on the business to take over Stock and Debtors at book value, the Patents at Rs. 3,000 and Plant at Rs. 500. He was also to pay the Creditors.

(*c*) C to take over the Shares in X Ltd. at Rs. 36 per share.

(*d*) The shares in Y Ltd. to be divided among partners in profit sharing ratio.

(*e*) Expenses of dissolution Rs. 340.

Show the Ledger Accounts recording the dissolution in the books of the firm.

(*Ans.* Loss on Realisation Rs. 2,500. A brings in Rs. 2,959. B brings in Rs. 4,812. C receives Rs. 7,952).

7. The following is the Balance Sheet of A, B and C on 31st March, 1989 :

Liabilities	Amount Rs.	Assets	Amount Rs.
Creditors	2,000	Cash	500
Bank Loan	500	Stock	2,000
Bills Payable	500	Plant	2,000
A's Capital	2,500	Debtors	1,000
B's Capital	1,500	Bills Receivable	1,000
		C's Capital (Overdrawn)	500
	7,000		7,000

It is decided to wind up the partnership. The assets realise : Stock Rs. 1,600 ; Plant Rs. 1,500 ; Debtors Rs. 750 ; Bills Receivable Rs. 700. Creditors were paid Rs. 20 less for discount granted by them. Profits and losses are shared equally. Costs of realisation amounted to Rs. 230. A debt which had been written off realised Rs. 100. Outstanding expenses paid Rs. 120.

Show what each partner will receive.

(*Ans.* Loss on Realisation 1,680. A receives Rs. 1,940. B receives Rs. 940. C brings in Rs. 1,060).

8. A, B and C were equal partners in a retail shop. They decided to retire and dispose of their business as on 31st March, 1989. On this date, their Balance Sheet was as follows :

BALANCE SHEET as on 31st March, 1989

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Capitals :	Rs.		Lease	1,250
A	3,000		Fixtures	220
B	1,000		Sundry Debtors	840
			Stock	3,060
		4,000	Cash at Bank	125
Sundry Creditors		480	C's Capital	1,085
General Reserve		2,100		
		6,580		6,580

The Lease and the Fixtures were disposed of for Rs. 2,700 and the cash duly received. The book debts were collected and realized Rs. 752. The Stock was sold by auction and produced Rs. 1,340 after payment of commission expenses. The Sundry Creditors were paid off, Rs. 38 being allowed for discount. The expenses for realisation amounted to Rs. 87. An unrecorded asset valued at Rs. 300 in possesion of A has been allowed to be retained by him. B who intends to use the name of the firm agrees to take over goodwill at Rs. 2,400.

Prepare whatever accounts may be necessary to show the result of the realization and the amount received by each partner.

(*Ans.* Profit on Realisation 2,073. A and C receive Rs. 4,091 and Rs. 306 respectively. B brings in Rs. 9).

9. Long, Short and Thin were carrying on a business in partnership sharing profits and losses in the ratio of 3 : 2 : 1 respectively. They decided to dissolve the firm on 31st March, 1989, on which date their Balance Sheet stood as follows :

Liabilities		Rs.	*Assets*	Rs.
Creditors		47,000	Land and Building	57,000
Long's Loan Account		10,000	Stock	50,000
Capital Accounts :			Debtors	50,000
Long	90,000		Cash	3,000
Short	10,000		Profit and Loss A/c	1,500
Thin	10,000	1,10,000	Short's Current A/c	2,000
Long's Current A/c		1,500	Thin's Current A/c	5,000
		1,68,500		1,68,500

Land and Buildings were sold for Rs. 40,000 and Stock and Debtors realised Rs. 30,000 and Rs. 42,000 respectively. The Goodwill was sold for Rs. 6,000. The expenses of realisation amounted to Rs. 1,200. An unrecorded

liability of Rs. 5,800 was settled against an unrecord asset valued at Rs. 10,000, the surplus being received in cash.

Prepare the necessary accounts closing the books of the firm.

(*Ans.* Loss on Realisation Rs. 36,000. Short brings in Rs. 4,500. Thin brings in Rs. 1,250. Long receives Rs. 72,750).

10. A, B and C are in partnership, sharing profits and losses as A 1/2, B 5/16 and C 3/16. The Capital Accounts were fixed under the partnership agreement. As a result of several consecutive years' losses, the firm's Balance Sheet on 31st March, 1989 was as under :

BALANCE SHEET of A, B and C as on 31st March, 1989

Liabilities		Amount Rs.	*Assets*		Amount Rs.
Capital Accounts :	Rs.		Current Accounts :	Rs.	
A	5,000		A	2,195	
B	2,000		B	1,733	
C	1,000	8,000	C	1,520	5,448
Sundry Creditors		2,953	Plant and Machinery		1,050
Bank Loan		5,500	Stock in Trade		6,059
			Sundry Debtors		3,572
			Cash in Hand		324
		16,453			16,453

It was resolved to dissolve the partnership as on this date. The firm's assets were realised as follows : Plant and Machinery Rs. 600; Stock in trade, Rs. 5,230 ; Sundry Debtors, Rs. 3,555. There was an unrecorded liability of Rs. 1,600 and an unrecorded asset of Rs. 3,500 which realised Rs. 1,900. Expenses of realisation were Rs. 300. Interest owing on Bank Loan was Rs. 800.

You are required to close the books of the firm.

(*Ans.* Loss on Realisation Rs. 2,096. B brings in Rs. 388. C brings in Rs. 913. A receives Rs. 1,757).

11. A, B and C were in partnership sharing profits and losses in the ratio of 3 : 2 : 1. They decided to dissolve the firm on 31st March, 1989 when their position was as follows :

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Creditors		18,000	Debotrs	23,000
Bills payable		5,000	Goodwill	7,000
Loan from Bank		2,000	Bills Receivable	2,000
Capitals :			Plant etc.	12,500
A	Rs. 12,000		Office Furniture	700
B	Rs. 5,000		Cash	800
C	Rs. 4,000	21,000		
		46,000		46,000

10% of the Book Debts proved bad and the Bills Receivable realised only Rs. 1,900. The Plant was sold for Rs. 7,500 and the Office Furniture was taken over by A at book value. The Bills Payable were met on maturity and the Loan from Bank was paid off at once. It was found impossible to pay off the ordinary creditors and it was arranged to allow them interest at 15% p.a. for three months. Expenses of realisation came to Rs. 525. Show the final result after every thing had been paid off, the goodwill proving worthless.

(*Ans.* Loss on Realisation Rs. 15,600. A receives Rs. 3,500. B brings in Rs. 200. C receives Rs. 1,400).

12. The following was the Balance Sheet of A and B sharing profits and losses in the ratio of 3 : 2 as on 31st March 1989 :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Creditors	38,000	Cash	11,500
Mrs. A's loan	10,000	Stock	6,000
B's loan	15,000	Debtors Rs. 20,000	
A's Capital	10,000	*Less* Provision 1,000	
B's Capital	8,000		19,000
		Furniture	4,000
		Plant	28,000
		Investments	10,000
		Profit and Loss A/c	2,500
	81,000		81,000

The firm was dissolved on 31st March, 1989 and the following was the result :

(*a*) A took over Investments at Rs. 8,000 and agreed to pay off the loan to his wife.

(*b*) The assets realised as follows :

Stock Rs. 1,000 less ; Debtors Rs. 18,500 ; Furniture Rs. 500 more ; Plant Rs. 3,000 less.

(*c*) Expenses of realisation were Rs. 950.

(*d*) Creditors were paid off less 2 1/2 % discount.

Show ledger accounts to close the books of the firm.

[*Adapted from Delhi B.Com.* (*Pass*) 1977]

(*Ans.* Loss on Realisation Rs. 6,000. A and B receive Rs. 6,900 and Rs. 4,600 respectively).

13. A and B entered into a partnership firm from 1st April, 1986. They commenced business with a capital of Rs. 60,000 and Rs. 40,000. Profits and losses were shared in the ratio of 3 : 2.

The business was carried on for three years, for which the results were as under :

Year ending 31st March, 1987, Profit Rs. 60,000.

Year ending 31st March, 1988, Profit Rs. 44,400.

Year ending 31st March, 1989, Loss Rs. 10,760.

As the business was no longer profitable, they agreed to dissolve the partnership on 31st March, 1989.

The partners drew Rs. 8,000 each per annum. On the date of dissolution, creditors were Rs. 32,800 and cash was Rs. 3,440.

The assets of the partnership realised Rs. 1,70,000, the expesnes being Rs. 1,000.

Close the books of the firm. Show your working in detail.

(*Ans.* Sundry assets on 31st March, 1989 Rs. 1,75,000. Loss on Realisation Rs. 6,000. A receives Rs. 88,584. B receives Rs. 51,056).

14. D, E and F sharing profits in the proportion of 3 : 2 : 1 agreed upon the dissolution of the firm. D was appointed to realise the assets and pay of the liabilities for which he was entitled to a lump sum amount of Rs. 950. The balance sheet of the firm on 31st March, 1989, was as under :

Liabilities	Amount Rs.	*Assets*		Amount Rs.
Capital Accounts :		Machinery		40,500
D	50,000	Stock		7,500
E	20,000	Invesments		20,000
Creditors	18,500	Debtors	Rs. 9,300	
Investment Fluctuation		*Less* Provision	600	
Fund	6,000			8,700
		F's Current A/c		11,500
		Cash		6,300
	94,500			94,500

The investments are taken over by D for Rs. 18,000. E takes over all the stocks at Rs. 7,000 and debtors amounting to Rs. 5,000 at Rs. 4,500. Machinery is sold for Rs. 55,000. The remaining debtors realise 50% of the book values. The actual expenses of realisation amounted to Rs. 600. Creditors accept Rs. 1,000 less in full settlement.

Show the necessary ledger accounts on completion of the dissolution of the firm.

(*Ans.* Profit on Realisation Rs. 16,500. D receives Rs. 41,200. E receives Rs. 14,000. F brings in Rs. 8,750).

15. Rita and Shobha are partners in a firm, Fancy Garments Exports, sharing profits and losses equally. On 1st April, 1989, the Balance Sheet of the firm was as follows :

Liabilities	Rs.	*Assets*		Rs.
Sundry Creditors	75,000	Cash		6,000
Bills Payable	30,000	Bank		30,000
Rita's Husband's Loan	15,000	Stock		75,000
Reserve Fund	24,000	Book-debts	66,000	
Rita's Capital	90,000	*Less* provision	6,000	
Shobha's Capital	30,000			60,000
		Plant and Machinery		45,000
		Land and Building		48,000
	2,64,000			2,64,000

The firm was dissolved on the date given above. The following transactions took place :

(*i*) Rita undertook to pay her husband's Loan and took over 50 per cent of the stock at a discount of 20 per cent.

(*ii*) Book Debts realised Rs. 54,000 ; balance of the Stock was sold off at a profit of 30 per cent on cost.

(*iii*) Sundry Creditors were paid out at a discount of 10 per cent. Bills payable were paid in full.

(*iv*) Plant and Machinery realised Rs. 75,000, Land and Building Rs. 1,20,000.

(*v*) Rita took over the goodwill of the firm at Rs. 30,000.

(*vi*) Realization expenses were Rs. 2,250.

Show the Realization Account, Bank Account and Partners' Capital Accounts in the books of the firm. (*Adapted from All India SSCE, 1985*)

(*Ans*. Profit on Realisation Rs. 1,35,000. Rita receives Rs. 1,24,500. Shobha receives Rs. 1,09,500).

16. A, B and C are partners sharing profits and losses in the ratio of 5 : 3 : 2. On 31st March, 1989 they decided to dissolve the firm when their Balance Sheet was as under :

Liabilities		Amount Rs.	*Assets*	Amount Rs.
Sundry Creditors		4,380	Bank	654
Bills Payable		7,620	Sundry Detors	7,950
B's Loan		6,000	Stock	5,736
Capitals :			Machinery	4,500
A	Rs. 7,500		Investments	3,000
B	Rs. 4,500		Freehold Property	12,000
C	Rs. 3,000	15,000		
Current Accounts :				
A	Rs. 360			
B	219			
C	261	840		
		33,840		33,840

A took over freehold property for Rs. 3,500 and B took over investments for Rs. 2,400. The remaining assets realised as follows :

Debtors	Rs. 9,060
Old bad debts	Rs. 900
Stock	Rs. 4,680
Machinery	Rs. 3,546.

There was a contingent liability in respect of bills discounted of Rs. 11,100. The liability of the firm of Rs. 1,500 on account of bills discounted and dishonoured has not so far been recorded in the books. Realisation expenses were Rs. 300.

Prepare Realisation Account, Bank Account and Partner's Capital Accounts.

(*Ans*. Loss on Realisation Rs. 22,000. A, B and C bring in Rs. 6,640, Rs. 4,281 and Rs. 1,139 respectively).

17. A, B and C were partners sharing profit and losses in the ratio of 2 : 2 : 1. On 1st April, 1989 their Balance Sheet was as follows :

Liabilities	Rs.	Assets		Rs.
Capitals :		Cash at bank		24,400
A	30,000	Debtors	16,000	
B	24,000	*Less* Provision	400	15,600
C	12,000	Stock		12,000
Reserve	10,000	Furniture		4,000
Creditors	24,000	Building		44,000
	1,00,000			1,00,000

The firm was dissolved on that date. The assets realised as follows :

Debtors	Rs. 14,000
Stock	Rs. 10,000
Furniture	Rs. 2,000
Building	Rs. 50,000

The Creditors were settled for Rs. 22,000. It was found, however, that there was a liability for Rs. 6,000 for damages which had to be paid. Realisation expenses amounted to Rs. 2,000.

Prepare Realisation Account, Partners' Capital Accounts and Bank Account to close the books of the firm. (*Adapted from Delhi SSCE, 1989*)

(*Ans*. Loss on Realisation Rs. 5,600. A, B and C receive Rs. 31,760, Rs. 25,760 and Rs. 12,880 respectively).

18. A and B are partners in a firm sharing profits and losses in the ratio of 2 : 1. On 31st March 1989, their Balance Sheet was as follows :

Liabilities	Rs.	*Assets*		Rs.
Bank Overdraft	30,000	Cash in Hand		6,000
General Reserves	54,000	Bank Balance		10,000
Investment Fluctuation Fund	22,000	Sundry Debtors	Rs. 26,000	
A's Loan	34,000	*Less* Reserve	2,000	24,000
A's Capital	50,000			
		Investments		40,000
		Stock		10,000
		Furniture		10,000
		Building		60,000
		B's Capital		30,000
	1,90,000			1,90,000

On that date the partners decided to dissolve the firm. A took over Investments at an agreed valuation of Rs. 35,000. Other assets were realized as follows :

Sundry Debtors : Full amount. The firm could realize stock at 15% less and Furniture at 20% less than the book values. Building was sold at Rs. 1,00,000.

Compensation to employees paid by the firm amounted to Rs. 10,000. This liability was not provided for in the above Balance Sheet. Expenses of realisation amounted to Rs. 500.

You are required to close the books of the firm by preparing Realization Account, Partners' Capital Accounts and Bank Account.

(Adapted from All India SSCE, 1989)

(*Ans*. Profit on Realisation Rs. 45,000. A receives Rs. 81,000 and B receives Rs. 3,000).

19. The following is Balance Sheet of A and B as on 31st March, 1989:

Liabilities		Rs.	*Assets*		Rs.
Sundry Creditors		30,000	Cash in hand		1,000
Bills Payable		8,000	Cash at Bank		8,000
Mrs. A's Loan		5,000	Stock in trade		5,000
Mrs. B's Loan		10,000	Investments		10,000
Reserve Fund	10,000		Debtors	20,000	
Less Loss for			*Less* Provision	2,000	
the current year	3,000	7,000			18,000
			Plant and Machinery		20,000
Investments Fluctuation Fund		1,000	Building		15,000
			Goodwill		4,000
A's Capital		10,000			
B's Capital		10,000			
		81,000			81,000

The firm was dissolved on 1st April, 1989 :

(*a*) A promised to pay off Mrs. A's loan and took stock-in-trade at Rs. 4,000.

(*b*) B took away half the Investments at 10% discount.

(*c*) Debtors realised Rs. 19,000.

(*d*) Creditors and Bills Payable were due on an average basis one month after 31st March, but they were paid immediately on 31st March, at 12% discount per annum.

(*e*) Plant realised Rs. 25,000, Building Rs. 40,000, Goodwill Rs. 6,000 and remaining Investments at Rs. 4,500.

(*f*) There was an old typewriter in the firm which had been written off completely from the books. It is now estimated to realise Rs. 300. It was taken away by B at the estimated price.

(*g*) Realisation expenses were Rs. 680.

Prepare the necessary ledger accounts in the books of A and B.

(Adapted from All India SSCE, 1988)

(*Ans*. Profit on Realistion Rs. 32,000. A receives Rs. 30,500 and B receives Rs. 24,700).

20. Two firms 'P & Q' and 'R & S' agreed to amalgamate their businesses. Their positions as on March 31, 1989 were as follows :

BALANCE SHEET OF 'P & Q'
as on March 31, 1989

Liabilities	Rs.	Assets	Rs.
Creditors	1,04,000	Cash at bank	1,56,000
Capitals :		Debtors	1,30,000
P	1,82,000	Stock in trade	42,000
Q	1,30,000	Office Building	78,000
		Furniture	10,000
	4,16,000		4,16,000

BALANCE SHEET OF 'R & S'

Liabilities	Rs.	Assets	Rs.
Creditors	52,000	Cash at bank	65,000
Capitals :		Debtors	1,04,000
R	91,000	Stock in trade	26,000
S	65,000	Furniture	13,000
	2,08,000		2,08,000

Creditors and debtors were not taken over by the firm PQRS. Office building was retained by P and Q but the new firm agreed to pay a monthly rent of Rs. 400. The cash required for working of the new firm was estimated at Rs. 1,30,000 to be provided by the partners in their new profit sharing proportions as under : P 3/10, Q 3/10, R 2/10, S 2/10.

(1) Write the books of P & Q and R & S.

(2) Give the opening Balance Sheet of PQRS. State your assumptions, if any, clearly.

[*Ans*. Balance Sheet Total (PQRS) Rs. 2,21,000].

21. The Balance Sheets of Messrs. A & B and Messrs. C & D as on 31st March 1989 were as follows :

Liabilities	A & B Rs.	C & D Rs.	Assets	A & B Rs.	C & D Rs.
Capitals :			Land & Workshops	10,000	12,000
A	10,000		Machinery	7,000	8,000
B	10,000		Furniture	3,000	3,500
C		10,000	Sundry Debtors	6,000	8,500
D		10,000	Stock	8,000	10,000
Creditors	15,000	10,000	Cash & Bank	3,000	1,000
Loan		10,000			
Outstanding Expenses	2,000	3,000			
	37,000	43,000		37,000	43,000

The two firms decided to amalgamate and form into AC & Co. with effect from 1st April, 1989. Partners would share profits equally between themselves as they were doing prior to amalgamation and they agreed to the following revaluation of assets and liabilities :

	A & B	C & D
	Rs.	Rs.
Land and Workshops	10,000	10,000
Machinery	7,000	8,000
Furniture	2,500	2,500
Sundry Debtors	5,500	7,000
Stock	8,000	8,000
Outstanding Expenses	2,000	3,500

In addition to the above, it was decided—

(*i*) that the new firm would not take over the loan of Messrs. C & D.

(*ii*) that the Goodwill of Messrs. A & B and Messrs. C & D was valued at Rs. 10,000 and Rs. 5,000 respectively ;

(*iii*) that the capital of the partners in the new firm should be Rs. 14,000 each, partners introducing or withdrawing necessary cash, as the case may be.

You are required to show—

(*a*) the Revaluation Accounts of Messrs A & B and Messrs. C & D and their capital accounts prior to amalgamation ;

(*b*) the Opening Balance Sheet of the new firm assuming that all arrangement have been duly carried out.

[*Ans.* (*a*) Loss on revalution of assets A & B Rs. 1,000 ; C & D Rs. 7,000 ; Capital Accounts prior to amalgamation : A Rs. 14,500 ; B Rs. 14,500 ; C Rs. 14,000 ; D Rs. 14,000. (*b*) Balance Sheet Rs. 86,500].

UNIT 2
Company Accounts

(18 Marks)

(*i*) Nature of a company.

(*ii*) Accounting for share capital :

(*a*) Issue and allotment of shares : entries to be passed for application, allotment and calls ;

(*b*) Over-subscription and under-subscription ;

(*c*) Issue at par, at a premium, at a discount ;

(*d*) Calls in advance—permissibility, accounting entries ;

(*e*) Calls in arrears.

Forfeiture of shares due to non-payment of calls :

(*a*) Accounting treatment ;

(*b*) Re-issue of forfeited shares—at par, at a premium, and at a discount—accounting treatment.

(*iii*) Issues of debentures :

(*a*) Meaning of debentures;

(*b*) Nature of debenture capital (loan capital) ;

(*c*) Issue of debentures at par, at a discount and at a premium ;

(*d*) Debentures as a collateral security ;

(*e*) Debentures interest—concept of periodic payment.

Redemption of debentures :

(*a*) Meaning ;

(*b*) Accounting entries—issue at par and redeemable at par, issue at discount and redeemable at par, issue at premium and redeemable at par, issue at par and redeemable at premium, issue at discount and redeemable at premium ;.

(*c*) Treatment of discount/loss on the issue of debentures ;

(*d*) Sources of redemption of debentures :

— From the proceeds of fresh issue of share-capital and debentures ;

— out of accumulated profit, including sinking fund ;

— out of current resources.

Methods of redemption of debentures :

(*a*) In lump-sum at the end of stipulated period,

(*b*) By draw of lots ;

(*c*) By purchasing in the open market ;

(*d*) By converstion into new debentures or shares.

5

Company Accounts—Shares

A company, in common language, means a group of persons associated together for some common purpose. The present Chapter deals with some introductory topics but mainly with the accounts of companies incorporated under the Companies Act, 1956.

DEFINITION OF COMPANY

A company is a voluntary association of persons formed for some common purpose, with capital divisible into parts, known as shares, and with a limited liability. It is a creation of law and is sometimes known as an artificial person with a perpetual succession and a common seal. It exists only in contemplation of law and has no physical existence. Lindley, L.J. defined a company as "an association of many persons who contribute money or money's worth to a common stock, and employ it in some common trade or business (*i.e.*, for a common purpose), and who share the profit or loss (as the case may be) arising therefrom. The common stock so contributed is denoted in money and is the capital of the company. The persons who contribute it, or to whom it belongs, are members. The proportion of capital to which each member is entitled is his share. Shares are always transferable although the right to transfer them is often more or less restricted. On incorporation a company acquires a personality distinct from its members. A member can, therefore, be its shareholder and a creditor simultaneously".

CHARACTERISTICS OF COMPANY

The main characteristics of a company are as follows :

1. **Separate legal entity.** A company has a legal entity distinct from its members. As such, the members of a company can enter into contracts with the company in the same manner as any other individual can. A member of the company cannot be held liable for the acts of the company (beyond a certain amount) even if he holds virtually the entire share capital. Again the members are not the agents of the company and so they cannot bind the company by their acts.

This characteristic of a company was also emphasised by Chief Justice Marshall of the U.S.A. when he defined a company "as a person, artificial, invisible, intangible and existing only in the eyes of the law. Being a mere creature of law, it possesses only those properties which the charter of its creation confers upon it, either expressly or as accidental to its very existence".

2. **Perpetual succession and a common seal.** A company is a juristic person with a perpetual succession and a common seal. Its life

does not depend on the life of its members. The company goes on until it is wound up. Again, since the company has no physical existence, it must act through its agents and all such contracts entered into by its agents must be under the seal of the company.

3. **Limited liability.** A company may be a company limited by shares or a company limited by guarantee. In a company limited by shares, the liability of shareholders (also called members) is limited to the unpaid value of the shares, whereas in a company limited by guarantee the liability of members is limited to such amount as the members may undertake to contribute to the assets of the company in the event of its being wound up.

4. **Transferability of shares.** The capital of a company is divided into parts, called shares. These shares are, subject to certain conditions, freely transferable, so that no shareholder is permanently or necessarily wedded to a company.

5. **Separate property.** A company is a legal person distinct from its members. It is, therefore, capable of owning, enjoying and disposing of property in its own name. Although the capital and assets of the company are contributed by its shareholders, they are not the private and joint owners of the property of the company.

COMPANY DISTINGUISHED FROM PARTNERSHIP

The principal differences between a company and a partnership are as follows :

1. *Regulating Act.* A company is regulated by the Companies Act, 1956, while a partnership is governed by the Indian Partnership Act, 1932.

2. *Mode of creation.* A company comes into existence after registration under the Companies Act, 1956. Registration is not compulsory in the case of a partnership.

3. *Number of members.* (*a*) *Minimum.* The minimum number of partners in a firm is two whereas the minimum number of members in a private company is two and in case of a public company seven.

(*b*) *Maximum.* The maximum number of partners in a firm carrying on banking business can be ten and in any other business twenty. The maximum number of shareholders in a private company is fifty : there is no limit to the maximum number in case of a public company.

4. *Legal status.* A company has a legal entity distinct from that of its members. A firm is not a 'person' in the eyes of the law ; it is made up of the several persons who compose it. The partners are collectively called a firm. As such—

(*a*) the members of a company are not personally liable for its contracts, debts or for wrongs done by it, while the members of a partnership firm are.

(*b*) the property of a company belongs to the company and not to its individual members or shareholders (although they own the company)

whereas the property of a partnership firm is the joint property of the partners who are collectively entitled to it.

5. *Liability of members.* The liability of the members of a company to contribute towards satisfaction of the company's debts and liabilities is limited, whereas partners' liability to contribute towards payment of the partnership's debts and liabilities is unlimited. Again in the case of a partnership firm, the partners are jointly and severally liable to the creditors of the firm and a creditor obtaining judgment against the firm can proceed against and attach the property of the partners in the firm. But the creditor of a company is the creditor not of shareholders but of the company and cannot proceed against and attach the property of the shareholders, who are not directly liable to him. He can do so only against the property of the company.

6. *Management.* The affairs of a company are managed by its directors (who are elected representatives of shareholders) or managing director or manager and its members have no right to take part in the management. On the other hand, every member of a partnership firm may take part in its management unless the partnership agreement provides otherwise.

7. *Transferability of interest.* Shares in a company are freely transferable, unless its Articles otherwise provide. A partner cannot transfer his share without the consent of the other partners.

8. *Authority of members.* Each partner is an agent of the partnership firm to make contracts and incur liabilities so long as he acts in the course of the firm's business. On the other hand, a shareholder is not an agent of the company and has no such power to bind the company by his acts.

9. *Powers.* A partnership firm can do anything which the partners agree to do and there is no limit to its activities ; a company's powers are limited to those allowed by the objects clause in its Memorandum of Association.

10. *Restrictions on powers.* In a partnership, restrictions on the powers of a particular partner contained in the partners' agreement will not avail against outsiders, but those in the Memorandum or Articles of Association of a company are effective as against the public because they are public documents and anyone can inspect them to find out what is in them.

11. *Insolvency of firm and winding up of company.* The insolvency of a partnership firm means insolvency of all the partners whereas the winding up of an insolvent company does not make the members insolvent.

12. *Dissolution.* Unless a partnership is entered into for a fixed period, it may be dissolved at any time by any partner, and the partnership will automatically be dissolved by the death or insolvency of a partner. A company has a perpetual succession. No personal circumstance affecting a member, such as death, insolvency or unsoundness of mind, will affect its existence. It comes to an end only when it is wound up according to the provisions of the Companies Act, 1956.

KINDS OF COMPANIES

Companies may be of the following kinds :

Incorporated companies. An incorporated company is one which is formed for the purpose of carrying on a business and is incorporated under the Companies Act, 1956, or some earlier Companies Act.

Unincorporated companies. These are to all intents and purposes large partnerships. These are not regarded as distinct entities separate from the members constituting them. Their shares may be transferable, but the liability of the members is unlimited. Such companies can no longer be formed under the Companies Act, 1956, and also if the number of their members exceeds ten in the case of companies carrying on banking business, and twenty in the case of any other business, they become, unless registered under the Companies Act, 1956, illegal associations.

KINDS OF INCORPORATED COMPANIES

They are of the following kinds :

1. **Statutory companies.** These are the companies which are created by Special Acts of Legislature, *e.g.*, Reserve Bank of India, State Bank of India, etc. They are mostly concerned with public utilities, *e.g.*, railways, tramways, gas and electric companies. The provisions of the Companies Act, 1956 apply to them, if they are not inconsistent with the provisions of the Special Acts under which these companies are formed.

2. **Registered companies.** These are the companies which are incorporated under the Companies Act, 1956 or earlier Companies Acts. These are by far the most commonly found companies. Registered companies may be :

(*a*) **Companies limited by shares.** Where the liability of the members of a company is limited by the Memorandum to the amount unpaid on the shares, the company is known as a company limited by shares. The liability can be enforced during the existence of the company as also during the winding up of the company.

(*b*) **Companies limited by guarantee.** Where the liability of the members of a company is limited by the Memorandum to such an amount as the members undertake to contribute to the assets of the company in case of its winding up, the company is called a company limited by guarantee. Such companies are not formed for the purpose of profit but for the promotion of art, science, culture, charity, sport, commerce or for some other similar purpose. They may or may not have share capital.

(*c*) **Unlimited companies.** The liability of members, in this type of companies, is unlimited. Every member is liable for the debts of the company as in an ordinary partnership in proportion to his interest in the company. Such a company may or may not have share capital. If it has share capital, it may be a public company or a private company.

PRIVATE COMPANY AND PUBLIC COMPANY

Private company. A private company means a company which by its Articles—

(*a*) *restricts* the right to transfer its shares, if any ;

(*b*) *limits* the number of its members to *fifty*. This does not include—

(*i*) persons who are in the employment of the company, and

(*ii*) persons who, having been formerly in the employment of the company, were members of the company while in that employment and have continued to be members after the employment ceased ; and

(*c*) *prohibits* any invitation to the public to subscribe for any shares in, or debentures of, the company. Where two or more persons hold one or more shares in a company jointly, they shall be treated as a single member.

Public company. A public company means a company which is not a private company.

Distinction between a public company and a private company

1. *Minimum number.* The minimum number of persons required to form a public company is seven. It is two in case of a private company.

2. *Maximum number.* There is no restriction on maximum number of members in a public company, whereas the maximum number cannot exceed fifty in a private company.

3. *Commencement of business.* A private company can commence business immediately on incorporation. A public company has to further obtain a certificate to commence business before it can commence business.

4. *Number of directors.* A public company must have at least three directors whereas a private company must have at least two directors.

5. *Restriction on appointment of directors.* In the case of a public company, the directors must file with the Registrar a consent to act as director or sign the Memorandum of Association or enter into a contract for their qualification shares. The directors of a private company need not do so.

6. *Restriction on invitation to subscribe for shares.* A public company invites the general public to subscribe for the shares in, or the debentures of, the company. A private company by its Articles prohibits any such invitation to the public.

7. *Transferability of shares.* In a public company, the shares are freely transferable. In a private company the right to transfer shares is restricted by the Articles.

8. *Allotment before minimum subscription.* A private company can commence allotment before the minimum subscription is subscribed for or paid. A public company cannot do so.

9. *Prospectus.* A private company need not issue or file with the Registrar a prospectus or a statement in lieu of prospectus. A public company has no escape from it.

10. *Issue of new shares.* When a public company issues new shares, it has first to offer these shares to the existing equity shareholders *pro rata*, unless the members in a general meeting decide otherwise. There is no such requirement in case of a private company.

11. *Special privileges.* A private company enjoys some special privileges. A public company enjoys no such privileges.

FORMATION OF COMPANY

Any seven or more persons (in case of a private company any two or more persons) associated for any lawful purpose may form a company. Before they do that, they have to file certain documents with the Registrar of Companies and have to comply with certain requirements. If the Registrar is satisfied that all the formalities have been complied with, he issues what is called a 'certificate of incorporation'. A company comes into existence only when such a certificate is issued by the Registrar. A detailed discussion of this may be found in any book on 'Business Organisation' or 'Mercantile Law'. Here we shall only discuss two important documents, *viz.*, Memorandum of Association and Articles of Association, which have to be prepared in connection with the formation of a company.

MEMORANDUM OF ASSOCIATION

The Memorandum of Association is the fundamental document of a company. It constitutes the foundation on which the structure of the company is based. It is the charter of the company and lays down the area of operation of the company. It also regulates the relations of the company with the outsiders.

Contents of Memorandum. The Memorandum of every company shall contain the following clauses :

1. The *name* of the company, with 'Limited' as the last word of the name in the case of a public limited company and with 'Private Limited' as the last words of the name in the case of a private limited company.

2. The *State* in which the registered office of the company is to be situate.

3. The *objects* of the company which shall be classified as—

(*a*) the *main objects* of the company to be pursued by the company on its incorporation ;

(*b*) *objects incidental* or ancillary to the attainment of the main objects ; and

(*c*) *other objects* of the company not included in (*a*) and (*b*).

4. In the case of companies (other than trading corporations) with objects not confined to one State, the States to whose territories the objects extend.

5. In the case of a company limited by shares or by guarantee, the Memorandum shall also state that the *liability* of its members is *limited*.

6. In the case of a company having a share capital, the amount of *share capital* with which the company is to be registered and the division thereof into shares of a fixed amount. In such a company each subscriber shall take at least one share and shall write opposite his name the number of shares he takes. The Memorandum of a company limited by guarantee shall also state that each member undertakes to contribute to the assets of the company in the event of its being wound up.

In addition to the above clauses which are required by law to be included in the Memorandum, other clauses may also be included in it where this is considered desirable.

The Memorandum shall conclude with an 'Association Clause' which states that the subscribers desire to form a company and agree to take shares in it.

ARTICLES OF ASSOCIATION

The Articles of Association are the rules and regulations for the internal management of the affairs of a company. They are framed with the object of carrying out the aims and objects of the Memorandum of Association. They are next in importance to the Memorandum.

Contents of Articles

Articles usually contain provisions relating to the following matters :

(1) Share capital, rights of shareholders, variation of these rights, payment of commissions, share certificates. (2) Lien on shares. (3) Calls on shares. (4) Transfer of shares. (5) Transmission of shares. (6) Forfeiture of shares. (7) Conversion of shares into stock. (8) Share warrants. (9) Alteration of capital. (10) General meetings and proceedings thereat. (11) Voting rights of members, voting and poll, proxies. (12) Directors, their appointment, remuneration, qualifications, powers and proceedings of Board of directors. (13) Manager. (14) Secretary. (15) Dividends and reserves. (16) Accounts, audit and borrowing powers. (17) Capitalisation of profits. (18) Winding up.

In framing the Articles of a company care must be taken to see that regulations framed do not go beyond the powers of the company itself as contemplated by the Memorandum of Association. They should also not violate any of the provisions of the Companies Act. If they do, they would be *ultra vires* (beyond the powers) the Memorandum or the Act and will be null and void.

Every company must have its own Articles. But a company limited by shares may adopt any or all the provisions of Table A in Schedule I to the Companies Act, 1956 or may adopt Table A subject to certain modifications. If in the case of any such company the Articles are registered, but are silent on any point, regulations in Table A, so far as they are applicable, shall apply to that company. The chief advantage of adopting Table A is that its provisions are legal beyond doubt.

PROSPECTUS

A prospectus is a document inviting deposits from the public or offers from the public for the subscription of any shares in, or debenture of, a company. A private company need not issue a prospectus as it prohibits any invitation to the public to subscribe for any shares in, or debentures of, the company. It is also not obligatory for a public company to issue a prospectus. If it does not issue a prospectus, it must deliver to the Registrar a statement called 'statement in lieu of prospectus'.

A prospectus must give complete information about all the facets of the company so that the persons who apply for the shares or debentures may decide whether they should go in for the shares or debentures of the company or not. The Companies Act has prescribed the matters which must be specified in a prospectus. In some cases, the company has also to set out in the prospectus the reports of the auditors and the accountants and experts connected with the formation of the company.

Minimum Subscription

This is the amount stated in the prospectus as the minimum amount which must be raised by the issue of share capital before the shares are allotted to the applicants. This minimum amount should be sufficient to cover the following items :

(*i*) The *purchase price* of any property purchased or to be purchased which is to be met out of the proceeds of the issue ;

(*ii*) Any *preliminary expenses* (*i.e.*, expenses relating to the formation of the company) payable by the company ;

(*iii*) The *repayment of any moneys borrowed* by the company in respect of any of the foregoing matters :

(*iv*) *Working capital ;*

(*v*) *Any other expenditure*, stating the nature and purpose thereof and the estimated amount in each case.

COMMENCEMENT OF BUSINESS

A private company can commence business immediately after its incorporation. But a public company can do so only when it obtains 'certificate of commencement of business'. This certificate is granted on the fulfilment of certain conditions, the most important of which is that the company has raised sufficient capital to run its business smoothly.

ACCOUNTS OF COMPANIES

The accounts of limited companies may be divided into three main sections, *viz.*, those dealing with —

1. The financial operations consequent upon the formation of the company. These include the raising of the company's capital and the detailed accounts relating to Share Capital and Debentures.

2. The ordinary trading or financial transactions of the company ; and

3. The appropriation or distribution of profits, the creation of reserves and sinking funds, the redemption of shares and debentures, and the compilation of final accounts and balance sheet at the close of the trading period. The Balance Sheet of a company must be in a form given in Part I of Schedule VI to the Companies Act, 1956. The Profit and Loss Account must comply with the requirements as given in Part II of Schedule VI.

As required by Schedule VI of the Companies Act, 1956 the Balance Sheet of a company may be prepared—

(1) in a horizontal form, or

(2) in a vertical form.

The horizontal form of Balance Sheet of a company, with major headings, is as follows :

BALANCE SHEET of............as at............

Figures for the previous year Rs.	LIABILITIES	Figures for the current year Rs.	Figures for the previous year Rs.	ASSETS	Figures for the current year Rs.
	SHARE CAPITAL			FIXED ASSETS	
	Authorised			Original Cost	
	Issued			+ Additions during the year	
	Subscribed			– deductions during the year	
	Less Calls unpaid			–depreciation	
	Add Forfeited shares			INVESTMENTS	
	RESERVES AND SURPLUS			LOANS AND ADVANCES	
	Capital Reserve			(A) CURRENT ASSETS	
	Capital Redemption Reserve			(B) LOANS AND ADVANCES	
	Share Premium			MISCELLANEOUS EXPENDITURE	
	Other Reserves			(to the extent not written of)	
	Sinking Funds			Preliminary expenses	
	SECURED LOANS			Commission or Brokerage on Shares or Debentures	
	UNSECURED LOANS			Discount on Issue of Shares or Debentures	
	CURRENT LIABILITIES AND PROVISIONS			PROFIT & LOSS ACCOUNT	
	(A) CURRENT LIABILITIES				
	(B) PROVISIONS				

The vertical form of Balance Sheet will be discussed in the last Chapter.

In this Chapter, we shall be mainly concerned with the first section. Regarding the second section, there is not much of the difference in the ordinary trading or financial transactions of a sole trader or a firm and the company. We shall be dealing with the issue and redemption of debentures in the next Chapter. As regards final accounts of a company, some idea will be given in the last Chapter of this Unit.

SHARE CAPITAL

The Memorandum of Association, as already observed, contains particulars of the share capital with which a company is to be registered. This is called the *Nominal, Registered or Authorised Capital* of the company. This is the maximum amount of capital which the company can issue during its lifetime unless the share capital of the company is increased. The company may not issue the whole of the authorised capital at the outset. The amount on the shares is usually called and received in instalments. The amount which an applicant has to pay to the company along with the application is called *application money*. When the applications are received, they are considered in a meeting of the Board of Directors. If the company accepts the application of an applicant, he is issued a *letter of allotment*. If the company does not accept the application of an applicant, his application money is returned and he is sent a *letter of regret*. On allotment, the second instalment called, *allotment money*, becomes due. Now the company starts its business, and as and when it needs more money, it demands a call from the shareholders. This is called *first call*. Likewise, the company keeps on making calls till the full amount is received by it on the shares.

Statutory Requirements as to Allotment

Before a company can proceed to allot shares, the following statutory requirements (*i.e.*, requirements as prescribed by the Companies Act, 1956) must be complied with :

1. *Minimum Subscription.* A company cannot allot any shares offered to the public for subscription unless the amount stated in the prospectus as 'minimum subscription' has been subscribed and the sum payable on application for such amount has been received by the company.

2. *Application money.* The amount payable on application on each share must not be less than five per cent of the nominal amount of the share.

All moneys received from applicants for shares must be deposited and kept deposited in a scheduled bank—

(*a*) until the certificate to commence business is obtained ; or

(*b*) where such certificate has already been obtained, until the full amount of minimum subscription has been received by the company.

3. *Statement in lieu of prospectus.* Where a company having a share capital does not issue a prospectus, it must not allot any shares or debentures unless at least three days before the first allotment of the shares or debentures, there has been delivered to the Registrar for registration a statement in lieu of prospectus. This noes not apply to a private company.

4. *Shares and debentures to be dealt in on stock exchange.* Where a prospectus, whether issued generally or not, states that application has been or will be made for permission for the shares or debentures offered thereby to be dealt in one or more recognised stock exchanges, the prospectus must state the name of the stock exchange or each of such stock exchanges.

VARIOUS TERMS USED IN CONNECTION WITH SHARE CAPITAL

The various terms used in connection with the share capital of a company are as follows :

1. **Authorised, Nominal or Registered Share Capital.** This is the amount with which a company is registered. It is usually expressed in the following manner :

"The Share Capital of the Company is (say) Rs. 1,00,000, divided into 10,000 Equity Shares of Rs. 10 each".

2. **Issued Capital.** It is that part of the authorised capital which is offered to the public for subscription. For example, in the above case, the company may have offered to the public for subscription only 8,000 shares. In that case the issued capital of the company is Rs. 80,000.

3. **Subscribed Capital.** It is that part of the issued capital which is taken up by the public. For example, in the above case, the public may apply for only 7,000 shares, in which case the subscribed capital would be Rs. 70,000. If the public takes up all the 8,000 shares, the issued and subscribed capital would mean one and the same thing.

4. **Called-up Capital.** As already observed, the company does not call at one time the full value of the shares issued. It does so in instalments. At any time it may be that the company has not called the full value of the shares, in which case called-up capital of the company would be less than the subscribed capital. Let us assume that the company is to receive the amount on the shares in the following manner, *viz.*, Re. 1 on application, Rs. 2 on allotment, Rs. 3 on first call, and Rs. 4 on second and final call. If, in the above case, the company has only called the amount upto first call, the called up capital of the company will be Rs. 42,000.

5. **Paid-up Capital.** It is that part of the called-up capital of the company which has actually been received. Assuming in the above case that a shareholder holding 1,000 shares defaulted to pay the first call of Rs. 3, the paid-up capital of the company would be Rs. 42,000 *less* Rs. 3,000, *i.e.*, Rs. 39,000.

6. **Uncalled Capital.** It is that portion of the subscribed capital which has not been called up. In the above case, uncalled capital is Rs. 28,000.

7. Reserve Capital. It is that part of uncalled capital of a company which can be called only in the event of its winding up. It is available only for the discharge of liabilities on the winding up of the company.

Reserve capital may be distinguished from 'reserve' 'reserve fund' and capital reserve. 'Reserve' means amount set aside by a business out of profits to strengthen the general financial position of the business. When this reserve is invested outside the business, it is called 'Reserve Fund'. 'Capital reserve' is a reserve which is created out of capital profits, *e.g.*, profit on revaluation of assets. In case of a limited company, the following are capital profits :

(*a*) Profits prior to incorporation in case of a private company and profits prior to commencement of business in case of a public company.

(*b*) Premium on issue of shares and debentures.

(*c*) Profit on forfeiture of shares.

(*d*) Profit on redemption of debentures.

(*e*) Amount utilised out of profits to redeem redeemable preference shares.

Capital profits are transferred to capital reserves.

Illustration 1. A company is registered with the following share capital :

1,00,000 Equity Shares of Rs. 10 each, and 50,000 Preference Shares of Rs. 10 each, payable in the following manner :

10% on application ; 20% on allotment ; 30% on first call ; and the balance on second and final call.

The company offered to the public for subscription 80,000 Equity Shares and the whole of the Preference Shares. The public applied for all the Equity Shares and 40,000 Preference Shares. The company duly allotted these shares. It made only the first call by 31st March 1989. The call money was received on all the shares excepting 200 Equity and 500 Preference Shares.

What is the company's (1) Nominal Capital, (2) Issued Capit (3) Subscribed Capital, (4) Called-up Capital, and (5) Paid-up Capital ?

Solution :

	Rs.
(1) *Nominal or Authorised or Registered Capital :*	
1,00,000 Equity Shares of Rs. 10 each	10,00,000
50,000 Preference Shares of Rs. 10 each	5,00,000
	15,00,000
(2) *Issued Capital :*	
80,000 Equity Shares of Rs. 10 each	8,00,000
50,000 Preference Shares of Rs. 10 each	5,00,000
	13,00,000
(3) *Subscribed Capital :*	
80,000 Equity Shares of Rs. 10 each	8,00,000
40,000 Preference Shares of Rs. 10 each	4,00,000
	12,00,000

(4) *Called-up Capital* :

80,000 Equity Shares of Rs. 10 each, Rs. 6 per share called up		4,80,000
40,000 Preference Shares of Rs. 10 each, Rs. 6 per share called up		2,40,000
		7,20,000

(5) *Paid-up Capital* :

From the Called-up Capital, calls in arrears (*i.e.*, the amount not received on Equity and Preference Shares on calls) will be shown as deduction. The balance will be Paid-up Capital. It will be shown as follows :

	Rs.	Rs.
80,000 Equity Shares of Rs. 10 each, Rs. 6 per share called up	4,80,000	
Less calls in arrears	600	
		4,79,400
40,000 Preference Shares of Rs. 10 each, Rs. 6 per share called-up	2,40,000	
Less calls in arrears	1,500	2,38,500
		7,17,900

SHARES

The share capital of a company is divided into a fixed number of units, called shares. In case of a public limited company, shares are freely transferable from one person to another. In case of a private limited company, shares can be transferred subject to the restrictions imposed by the company on the transfer of shares.

Shares of a company may be Equity Shares and/or Preference Shares. Equity shares are also known as Ordinary Shares.

1. **Equity Shares.** These are the main risk-bearing shares. They get a dividend (share of profit payable on shares, declared by the company in a general meeting) only when the preference shares have been paid the dividend. That is why there is no fixed rate of dividend on equity shares. Similarly, when the company is wound up, the equity shareholders get the payment last of all. Equity shares are meant for those investors who can undertake risk in the hope that they will in due course get substantial dividends.

2. **Preference Shares.** Preference shares are those which have two preferences over equity shares *viz.*, preference as to payment of dividend, and preference as to return of capital in the event of winding up of the company.

Preference shares may be—

(*a*) **Cumulative Preference Shares.** These are the shares which have the right to arrears of dividends if the company is unable to pay dividends in any year. The dividend on such shares goes on accumulating till it is fully paid. In any year, out of the profit of the company, first of all arrears of dividend on cumulative preference shares would be paid before any dividend is paid on other shares. These shares are best for an investor who wants to be assured of the regularity of income and security of capital.

(*b*) **Non-cumulative Preference Shares.** These are the shares on which the arrears of dividend do not go on accumulating. If in any year

the profits of the company are insufficient to pay the dividend at the fixed rate, the holders of these preference shares will have either to miss the dividend or accept the dividend at a lower rate.

(*c*) **Redeemable Preference Shares.** If the money received on preference shares is to be returned after a certain period, the shares are known as redeemable preference shares. Such shares can, however, be redeemed out of a new issue of shares or out of the profits of the company. Before these shares can be redemeed, they must be fully paid up. In case these shares are redeemed out of the profits of the company, a sum equivalent to the nominal value of the shares redeemed must be transferred to Capital Redemption Reserve Account.

From 1988 onwards, companies limited by shares have been prohibited from issuing preference shares which are irredeemable or are redeemable after the expiry of a period of ten years from the date of their issue.

(*d*) **Participating Preference Shares.** Preference shares are usually entitled to a fixed rate of dividend. If, however, they participate in surplus profit (if any) which remains after the equity shareholders have received dividend at a stated rate, the shares are known as participating preference shares.

ISSUE AND ALLOTMENT OF SHARES

As already observed, shares are offered to the public for subscription through prospectus. This is the most usual mode of offering shares to the public for subscription. A private company, however, raises its share capital by private subscription.

In case of a public company, when a certain number of shares are offered to the public for subscription, the company may receive applications for—

(*a*) the same number of shares it has offered to the public for subscription, or

(*b*) a smaller number of shares than it has offered to the public for subscription (this is a case of under-subscription), or

(*c*) a larger number of shares than it has offered to the public for subscription (this is a case of over-subscription)

In case (*b*) it is said that the issue is under-subscribed and in case (*c*) it is over-subscribed.

Again, the company may issue shares :

(*a*) at par,

(*b*) at a premium, or

(*c*) at a discount.

ISSUE OF SHARES AT PAR

Issue of shares at par means that a share is offered to the public at a price equivalent to its *face value* or *nominal value*. For example, when a share of the face value of Rs. 10 is issued for Rs. 10, the issue is said to be issue of shares at par.

Entries on Issue of Shares at Par

The entries required to record the issue of any class of shares are as follows :

1. When application money is received :

   Bank A/c Dr.
   To Share Application A/c
   (Being amounts received from sundry applicants on application @ Rs....... per share on.........shares)

If the company issues both Equity and Preference Shares, Equity Share Application and Preference Share Application Accounts are credited with respective amounts. The amount of the entry is found out by multiplying the number of shares applied for with the amount payable on application.

It is important to note that in practical system of accounts the entry for receipt of application money will be recorded not in Journal but in Cash Book on the debit side.

2. When shares are allotted :

   Share Application A/c Dr.
   To Share Capital A/c
   (Being entry for transfer of application money received on......shares to Share Capital A/c on allotment)

3. When letters of allotment are sent :

   Share Allotment A/c Dr.
   To Share Capital A/c
   (Being the amount due on Allotment on ......shares at Rs..........per share)

4. When allotment money is received :

   Bank A/c Dr.
   To Share Allotment A/c
   (Being receipt of allotment money on ....shares at Rs..........per share)

In practical system of accounts, this entry would appear on the debit side of Cash Book.

5. When the first call is made by the company :

   Share First Call A/c Dr.
   To Share Capital A/c
   (Being the amount due on First Call on ....shares at Rs..........per share).

6. When call money is received :

   Bank A/c Dr.
   To Share First Call A/c
   (Being receipt of Share First Call money at Rs.......per share on.........shares).

In practical system of accounts, this entry would appear on the debit side of Cash Book.

Likewise, when the company makes second and other calls, the entries on the above lines would be passed. Whichever is the last call, the word 'final' will be used with it. For example, if second call is the last call, it will be known as 'Second and Final Call'.

7. When expenses relating to issue of shares are paid :

Share Issue Expenses A/c Dr.
To Bank
(Being entry on payment of Share Issue Expenses)

Share Issue Expenses are shown under the heading "Miscellaneous Expenditure" on the assets side of the Balance Sheet till it is written off by transfer to Profit and Loss Account.

Illustration 2. Young Ltd. offered to the public 50,000 equity shares of Rs. 10 each, payable as follows :

Rs. 2·50 on application ;
Rs. 3·50 on allotment ;
Rs. 2 on first call ; and
Rs. 2 on second and final call.

The Company received applications for 50,000 shares which it duly allotted. Both the calls were made and duly received.

Pass the Journal Entries in the books of the Company.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To Equity Share Application A/c (Being receipt of Application Money from sundry applicants @ Rs. 2·50 per share on 50,000 equity shares).		1,25,000	1,25,000
	Equity Share Application A/c Dr. To Equity Share Capital A/c (Being entry for transfer of Application Money received on 50,000 equity shares to Share Capital A/c)		1,25,000	1,25,000
	Equity Share Allotment A/c Dr. To Equity Share Capital A/c (Being entry for the amount due on allotment of 50,000 equity shares @ Rs. 3·50 for share)		1,75,000	1,75,000

			Rs.	Rs.
	Bank A/c Dr. To Equity Share Allotment A/c (Being receipt of Allotment Money on 50,000 equity shares @ Rs. 3·50 per share).		1,75,000	1,75,000
	Equity Share First Call A/c Dr. To Equity Share Capital A/c (Being entry for the amount due on First Call on 50,000 equity shares @ Rs. 2 per share)		1,00,000	1,00,000
	Bank A/c Dr. To Equity Share First Call A/c (Being receipt of First Call Money on 50,000 equity shares @ Rs. 2 per share)		1,00,000	1,00,000
	Equity Share Second & Final Call A/c Dr. To Equity Share Capital A/c Being entry for the amount due on Second and Final Call on 50,000 equity shares @ Rs. 2 per share)		1,00,000	1,00,000
	Bank A/c Dr. To Equity Share Second & Final Call A/c (Being receipt of Second & Final Call on 50,000 equity shares @ Rs. 2 per Share)		1,00,000	1,00,000

Illustration 3. A Limited Company was incorporated with a capital of Rs. 4,00,000 consisting of 20,000 Equity Shares of Rs. 10 each and 10,000 Preference Shares of Rs. 20 each. It offered to the public 10,000 Equity and 5,000 Preference Shares payable as follows :

	Equity Shares	Preference Shares
	Rs.	Rs.
On Application	2	4
On Allotment	3	6
On First Call	2	4
On Second and Final Call	3	6

The Company received applications for just 10,000 Equity and 5,000 Preference Shares. The shares were duly allotted and all moneys duly received.

Show how the above transactions would appear in Journal. Prepare Ledger and show the liabilities side of the Balance Sheet.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To Equity Share Application A/c To Preference Share Application A/c (Being receipt of Application Money from sundry applicants @ Rs. 2 per share on 10,000 Equity Shares and Rs. 4 per share on 5,000 Preference Shares)		40,000	 20,000 20,000
	Equity Share Application A/c Dr. Preference Share Application A/c Dr. To Equity Share Capital A/c To Preference Share Capital A/c (Being entry for transfer of Application Money received on 10,000 Equity Shares and 20,000 Preference Shares to Share Capital A/c)		20,000 20,000	 20,000 20,000
	Equity Share Allotment A/c Dr. Preference Share Allotment A/c Dr. To Equity Share Capital A/c To Preference Share Capital A/c (Being entry for the amount due on allotment on 10,000 Equity Shares @ Rs. 3 per share and 5,000 Preference Shares @ Rs. 6 per share)		30,000 30,000	 30,000 30,000
	Bank A/c Dr. To Equity Share Allotment A/c To Preference Share Allotment A/c (Being receipt of Allotment Money on 10,000 Equity Shares @ Rs. 3 per share and 5,000 Preference Share @ Rs. 6 per share)		60,000	 30,000 30,000
	Equity Share First Call A/c Dr. Preference Share First Call A/c Dr. To Equity Share Capital A/c To Preference Share Capital A/c (Being entry for the amount due on First Call on 10,000 Equity Shares @ Rs. 2 per share and 5,000 Preference Shares @ Rs. 4 per share)		20,000 20,000	 20,000 20,000

Particulars		Rs.	Rs.
Bank A/c Dr.		40,000	
To Equity Share First Call A/c			20,000
To Preference Share First Call A/c			20,000
(Being receipt of First Call Money on Equity Shares @ Rs. 2 per share and Preference Shares @ Rs. 4 per share)			
Equity Share Second and Final Call A/c Dr.		30,000	
Preference Share Second and Final Call A/c Dr.		30,000	
To Equity Share Capital A/c			30,000
To Preference Share Capital A/c			30,000
(Being entry for the amount due on Second and Final Call on 10,000 Equity Shares @ Rs. 3 per share and 5,000 Preference Shares @ Rs. 6 per share)			
Bank A/c Dr.		60,000	
To Equity Share Second and Final Call A/c			30,000
To Preference Share Second and Final Call A/c			30,000
(Being receipt of Second and Final Call Money on 10,000 Equity Shares @ Rs. 3 per share and 5,000 Preference Shares @ Rs. 6 per share)			

LEDGER

Dr.

BANK ACCOUNT (Debit side)

	Rs.
To Equity Share Application A/c (On 10,000 Equity Shares @ Rs. 2 per share)	20,000
To Preference Share Application A/c (On 5,000 Preference Shares @ Rs. 4 per share)	20,000
To Equity Share Allotment A/c (On 10,000 Equity Shares @ Rs. 3 per share)	30,000
To Preference Share Allotment A/c (On 5,000 Preference Shares @ Rs. 6 per share)	30,000
To Equity Share First Call A/c (On 10,000 Equity Shares @ Rs. 2 per share)	20,000
To Preference Share First Call A/c (On 5,000 Preference Shares @ Rs. 4 per share)	20,000
To Equity Share Second and Final Call A/c (On 10,000 Equity Shares @ 3 per share)	30,000
To Preference Share Second and Final Call A/c (On 5,000 Preference Shares @ Rs. 6 per share)	30,000

Dr. **EQUITY SHARE APPLICATION ACCOUNT** Cr.

	Rs.		Rs.
To Equity Share Capital A/c (transfer)	20,000	By Bank	20,000

Dr. **PREFERENCE SHARE APPLICATION ACCOUNT** Cr.

	Rs.		Rs.
To Preference Share Capital A/c (transfer)	20,000	By Bank	20,000

Dr. **EQUITY SHARE CAPITAL ACCOUNT** Cr.

	Rs.		Rs.
To Balance c/d	1,00,000	By Equity Share Application A/c	20,000
		By Equity Share allotment A/c	30,000
		By Equity Share First Call A/c	20,000
		By Equity Share Second and Final Call A/c	30,000
	1,00,000		1,00,000

Dr. **PREFERENCE SHARE CAPITAL ACCOUNT** Cr.

	Rs.		Rs.
To Balance c/d	1,00,000	By Preference Share Application A/c	20,000
		By Preference Share Allotment A/c	30,000
		By Preference Share First Call A/c	20,000
		By Preference Share Second and Final Call A/c	30,000
	1,00,000		1,00,000

Dr. **EQUITY SHARE ALLOTMENT ACCOUNT** Cr.

	Rs.		Rs.
To Equity Share Capital A/c (transfer)	30,000	By Bank	30,000

Dr. PREFERENCE SHARE ALLOTMENT ACCOUNT Cr.

	Rs.		Rs.
To Preference Share Capital A/c (transfer)	30,000	By Bank	30,000

Dr. EQUITY SHARE FIRST CALL ACCOUNT Cr.

	Rs.		Rs.
To Equity Share Capital A/c (transfer)	20,000	By Bank	20,000

Dr. PREFERENCE SHARE FIRST CALL ACCOUNT Cr.

	Rs.		Rs.
To Preference Share Capital A/c (transfer)	20,000	By Bank	20,000

Dr. EQUITY SHARE SECOND AND FINAL CALL ACCOUNT Cr.

	Rs.		Rs.
To Equity Share Capital A/c (transfer)	30,000	By Bank	30,000

Dr. PREFERENCE SHARE SECOND AND FINAL CALL ACCOUNT Cr.

	Rs.		Rs.
To Preference Share Capital A/c (transfer)	30,000	By Bank	30,000

BALANCE SHEET as on.........

Liabilities	Rs.	Amount Rs.
SHARE CAPITAL		
Authorised		
20,000 Equity Shares of Rs. 10 each	2,00,000	
10,000 Preference Shares of Rs. 20 each	2,00,000	4,00,000
Issued, Subscribed, Called up and Paid up Capital		
10,000 Equity Shares of Rs. 10 each, fully called up	1,00,000	
5,000 Preference Shares of Rs. 20 each, fully called up	1,00,000	
		2,00,000

ISSUE OF SHARES AT A PREMIUM

If shares are issued at a price which is more than their face value (*i.e.*, the value set out in the Memorandum), the shares are said to have been issued at a premium. For example, when a share of the face value of Rs. 10 is issued for more than Rs. 10 (say for Rs. 11), the share is said to have been issued at a premium. A company would offer to issue shares at a premium only when it has been carrying on business for quite some time and has been making good profits. In such a case, the demand for the shares of that company would be more than the number of shares offered by the company to public for subscription. The public is prepared to pay some additional amount on those shares because the return on such shares is almost assured.

The Companies Act, 1956 does not place any restriction on issue of shares at a premium except that the amount received as premium has to be placed to a separate account called Share Premium Account. Share Premium may be used for any of the following purposes, namely,—

(*a*) to issue to the members fully paid bonus shares ;

(*b*) to write off preliminary expenses (*i.e.*, expenses incurred on the formation of the company) ;

(*c*) to write off commission or discount allowed on the issue of shares or debentures ;

(*d*) to provide for the premium payable on the redemption of preference shares or debentures of the company ;

The balance of Share Premium Account is shown under the head 'Reserves and Surplus' on the liabilities side of the Balance Sheet of a company.

Journal Entries

1. If the amount of premium is received along with application money :

Bank A/c Dr.
To Share Application A/c

(Being receipt of Application Money on......shares @ Rs.......per share on account of application and Rs..........on account of premium)

Share Application A/c Dr.
To Share Capital A/c
To Share Premium A/c

(Being transfer of Application Money to Share Capital A/c @ Rs.......per share and to Share Premium A/c @ Rs..........per share)

2. If the amount of premium is to be received with allotment money :

Share Allotment A/c Dr.
To Share Capital A/c
To Share Premium A/c
(Being amount due on allotment @ Rs.......per share, and Rs......per share on account of premium)

Bank A/c Dr.
To Share Allotment A/c
(Being receipt of Allotment Money on......shares)

Likewise, premium may be received partly with allotment and partly with first call. In such a case Share Premium Account will be credited partly at the time of making allotment and partly at the time of making first call.

Illustration 4. ABC Co. Ltd. issued 1,00,000 equity shares of Rs. 10 each at a premium of Rs. 5 per share payable as follows :

On Application	2	
On Allotment	8	(including premium)
On First Call	3	
On Final Call	2	

All the shares offered were subscribed for by the public and cash duly received. Pass journal entries to record the above issue of shares.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr.		2,00,000	
	To Share Application A/c			2,00,000
	(Being receipt of Application Money from sundry applicants @ Rs. 2 per share on 1,00,000 equity shares)			
	Share Application A/c Dr.		2,00,000	
	To Share Capital A/c			2,00,000
	(Being entry for transfer of Application Money received on 1,00,000 equity shares to Share Capital A/c)			
	Share Allotment A/c Dr.		8,00,000	
	To Share Capital A/c			3,00,000
	To Share Premium A/c			5,00,000
	(Being entry for the amount due on allotment of 1,00,000 equity shares @ Rs. 5 per share on Capital A/c and Rs. 3 per share on Share Premium A/c)			

			Rs.	Rs.
	Bank A/c Dr. To Share Allotment A/c (Being receipt of Allotment Money on 1,00,000 equity shares @ Rs. 8 per share)		8,00,000	8,00,000
	Share First Call A/c Dr. To Share Capital A/c (Being entry for the amount due on Share First Call on 1,00,000 equity shares @ Rs. 3 per share)		3,00,000	3,00,000
	Bank A/c Dr. To Share First Call A/c (Being receipt of Share First Call Money on 1,00,000 equity shares @ Rs. 3 per share)		3,00,000	3,00,000
	Share Second and Final Call A/c Dr. To Share Capital A/c (Being entry for the amount due on Share Second and Final Call on 1,00,000 equity shares @ Rs. 2 per share)		2,00,000	2,00,000
	Bank A/c Dr. To Share Second & Final Call A/c (Being receipt of Share Second and Final Call Money on 1,00,000 equity shares @ Rs. 2 per share)		2,00,000	2,00,000

Illustration 5. Bright Ltd. offered 2,00,000 equity shares of Rs. 10 each at a premium of 40% payable as follows :

Rs. 4 (including 50% of premium) on application.

Rs. 5 (including the balance premium) on allotment.

Rs. 5 on first and final call.

The company received applications for 2,00,000 shares which it duly allotted. All the moneys including premium were received on due dates.

Pass the Journal Entries and prepare Cash Book.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To Equity Share Application A/c (Being receipt of Application Money from sundry applicants on 2,00,000 equity shares @ Rs. 4 per share—Rs. 2 on Capital A/c and Rs. 2 on Share Premium A/c)		8,00,000	8,00,000

	Particulars		Rs.	Rs.
	Equity Share Application A/c Dr. To Equity Share Capital A/c To Equity Share Premium A/c (Being entry for transfer of Application Money received on 2,00,000 equity shares @ Rs. 4 per share—Rs. 2 to Share Capital A/c and Rs. 2 to Share Premium A/c)		8,00,000	 4,00,000 4,00,000
	Equity Share Allotment A/c Dr. To Equity Share Capital A/c To Equity Share Premium A/c (Being entry for the amount due on Allotment on 2,00,000 equity shares @ Rs. 5 per share—Rs. 3 on Capital A/c and Rs. 2 on Share Premium A/c)		10,00,000	 6,00,000 4,00,000
	Bank A/c Dr. To Equity Share Allotment A/c (Being Receipt of Allotment Money due on 2,00,000 equity shares @ Rs. 5 per share)		10,00,000	 10,00,000
	Equity Share First & Final Call A/c Dr. To Equity Share Capital A/c (Being entry for the amount due on First & Final Call on 2,00,000 equity shares @ Rs. 5 per share)		10,00,000	 10,00,000
	Bank A/c Dr. To Equity Share First & Final Call A/c (Being receipt of First & Final Call Money on 2,00,000 equity shares @ Rs. 5 per share)		10,00,000	 10,00,000

Dr. **CASH BOOK (BANK COLUMN)**

	Particulars	Rs.
	To Equity Share Application A/c (On 2,00,000 shares @ Rs. 4 per share—Rs. 2 on Capital A/c and Rs. 2 on Share Premium A/c)	8,00,000
	To Equity Share Allotment A/c (On 2,00,000 shares @ Rs. 5 per share—Rs. 3 on Capital A/c and Rs. 2 on Share Premium A/c)	10,00,000
	To Equity Share First and Final Call A/c (On 2,00,000 shares @ Rs. 5 per share)	10,00,000

ISSUE OF SHARES AT A DISCOUNT

When a company issues shares at a price which is less than the face value of the shares, it is said to have issued shares at a discount. For example, if a share of the face value of Rs. 10 is offered for sale at Rs. 9·50, it is a case of issue of shares at a discount.

According to Sec. 79 of the Companies Act, 1956, a company can issue shares at a discount if the following conditions are fulfiled :

(1) The shares to be issued at a discount must be of a class already issued.

(2) The issue of shares at a discount must be authorised by a resolution passed by the company in general meeting. The issue must also be sanctioned by the Company Law Board.

(3) The resolution must specify the maximum rate of discount which should not exceed 10 per cent. In special circumstances the Company Law Board may also sanction higher percentage of discount.

(4) The company must have been working for at least a year from the date it was entitled to commence business before it can issue shares at a discount.

(5) The shares to be issued at a discount must be issued within two months after the date on which the issue is sanctioned by the Company Law Board. The Company Law Board may extend this period of two months.

Although the Companies Act, 1956 permits issue of shares at a discount, it is very rarely that a company would offer shares at a discount. This is because issue of shares at a discount lowers the prestige of the company in the market. Moreover the investors would also not be enthusiastic in investing in such a company.

Discount on issue of shares is a capital expenditure. It is shown on the assets side of the Balance Sheet under the heading 'Capital Expenditure' and is written off by transfer to Profit and Loss Account over a period of time.

Journal Entry

When shares are issued at a discount, the entry for discount allowed is combined with the entry passed at the time when the shares are allotted. The entry is as follows :

Share Allotment A/c	Dr.
Discount on Issue of Shares A/c	Dr.
To Share Capital A/c	
(Being Allotment Money due @ Rs....... per share on......shares and adjustment of discount allowed)	

The next entry for receipt of allotment money is passed with the amount received on allotment (*i.e.*, the amount with which the Share Allotment Account is debited).

Illustration 6. A limited company issued 10,000 Equity Shares of Rs. 10 each, at a discount of Re. ·80, payable as Rs 1·50 on application, Rs. 2·50 on allotment and the balance on first and final call. The company has complied with all the legal formalities necessary for the issue of shares at a discount.

The entire issue was subscribed and allotted and all the money due on allotment and first call was received.

Show the journal entries necessary to record this issue.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr.		15,000	
	To Equity Share Application A/c			15,000
	(Being receipt of amount on applications for 10,000 Equity Shares at the rate of Rs. 1·50 per share)			
	Equity Share Application A/c Dr.		15,000	
	To Equity Share Capital A/c			15,000
	(Being transfer of Application Money to Share Capital A/c on allotment)			
	Equity Share Allotment A/c Dr.		25,000	
	Discount on Issue of Equity Shares A/c Dr.		8,000	
	To Equity Share Capital A/c			33,000
	(Being entry for amount due on allotment @ Rs. 2·50 per share. 80 Paise being allowed as discount as per resolution of the Board dated—and sanction of the Company Law Board dated—)			
	Bank A/c Dr.		25,000	
	To Equity Share Allotment A/c			25,000
	(Being receipt of money due on allotment)			
	Equity Share First and Final Call A/c Dr.		52,000	
	To Equity Share Capital A/c			52,000
	(Being entry for amount due on first and final call on 10,000 Shares @ Rs. 5·20 per share)			
	Bank A/c Dr.		52,000	
	To Equity Share First and Final Call A/c			52,000
	(Being receipt of money due on first and final call)			

UNDER-SUBSCRIPTION

When a company receives applications for a smaller number of shares than it has offered to the public for subscription, it is said that the issue has been *under-subscribed*. In such a case, the company allots all the shares applied for.

Illustration 7. On the basis of Illustration 3, prepare Cash Book, Journal and Balance Sheet, assuming that the Company receives applications

for 8,000 Equity and 4,000 Preference Shares, and that it receives the full amount on all the Shares.

Solution :

Dr. CASH BOOK (BANK COLUMN)

	Rs.
To Equity Share Application A/c (On 8,000 Equity Shares @ Rs. 2 per share)	16,000
To Preference Share Application A/c (On 4,000 Preference Shares @ Rs. 4 per share)	16,000
To Equity Share Allotment A/c (On 8,000 Equity Shares @ Rs. 3 per share)	24,000
To Preference Share Allotment A/c (On 4,000 Preference Shares @ Rs. 6 per share)	24,000
To Equity Share First Call A/c (On 8,000 Equity Shares @ Rs. 2 per share)	16,000
To Preference Share First Call A/c (On 4,000 Preference Shares @ Rs. 4 per share)	16,000
To Equity Share Second and Final Call A/c (On 8,000 Equity Shares @ Rs. 3 per share)	24,000
To Preference Share Second and Final Call A/c (On 4,000 Preference Shares @ Rs. 6 per share)	24,000

JOURNAL

				Rs.	Rs.
	Equity Share Application A/c	Dr.		16,000	
	Preference Share Application A/c	Dr.		16,000	
	To Equity Share Capital A/c				16,000
	To Preference Share Capital A/c				16,000
	(Being entry for the transfer of Share Application money to Share Capital A/c)				
	Equity Share Allotment A/c	Dr.		24,000	
	Preference Share Allotment A/c	Dr.		24,000	
	To Equity Share Capital A/c				24,000
	To Preference Share Capital A/c				24,000
	(Being entry for the amount due on Allotment @ Rs. 3 per share on 8,000 Equity Shares and Rs. 6 per share on 4,000 Preference Shares)				
	Equity Share First Call A/c	Dr.		16,000	
	Preference Share First Call A/c	Dr.		16,000	
	To Equity Share Capital A/c				16,000
	To Preference Share Capital A/c				16,000
	(Being entry for the amount due on First Call @ Rs. 2 per share on 8,000 Equity Shares and Rs. 4 per share on 4,000 Preference Shares)				

			Rs.	Rs.
Equity Share Second and Final Call A/c Dr.			24,000	
Preference Share Second and Final Call A/c Dr.			24,000	
To Equity Share Capital A/c				24,000
To Preference Share Capital A/c				24,000
(Being entry for the amount due on Second and Final Call @ Rs. 3 per share on 8,000 Equity Shares and Rs. 6 per share on 4,000 Preference Shares)				

Note. In practical system of accounts, transactions relating to cash are recorded in Cash Book. Thus when Cash Book is prepared, entries relating to Cash are not journalised.

BALANCE SHEET of............as on...............

Liabilities	Rs.	*Assets*	Rs.
SHARE CAPITAL		Cash at Bank	1,60,000
Authorised :			
20,000 Equity Shares of Rs. 10 each 2,00,000			
10,000 Preference Shares of Rs. 20 each 2,00,000	4,00,000		
Issued :			
10,000 Equity Shares of Rs. 10 each 1,00,000			
5,000 Preference Shares of Rs. 20 each 1,00,000	2,00,000		
Subscribed :			
8,000 Equity Shares of Rs. 10 each, fully called-up 80,000			
4,000 Preference Shares of Rs. 20 each, fully called-up 80,000	1,60,000		
	1,60,000		1,60,000

Illustration 8. Raj and Raj Ltd. offered 50,000 shares of Rs. 10 each at a premium of Rs. 2 per share, payable as under :

On Application Rs. 2 per share

On Allotment Rs. 5 (including premium)

On First and Final Call—Balance amount.

The Company received applications for 48,000 shares which it duly allotted. All moneys payable on allotment and share first call were duly received.

Record the above transactions in the books of the Company.

Solution :

JOURNAL

			Rs.	Rs.
	Share Application A/c Dr. To Share Capital A/c (Being transfer of Application Money received from sundry applicants on 48,000 equity shares @ Rs. 2 per share)		96,000	96,000
	Share Allotment A/c Dr. To Share Capital A/c To Share Premium A/c (Being entry for the amount due on Allotment on 48,000 shares @ Rs. 5 per share, Rs. 3 per share on Capital A/c and Rs. 2 per share on Share Premium A/c)		2,40,000	1,44,000 96,000
	Share First and Final Call A/c Dr. To Share Capital A/c (Being entry for the amount due on 48,000 equity shares on First and Final Call @ Rs. 5 per share)		2,40,000	2,40,000

Dr. CASH BOOK (BANK COLUMN)

		Rs.
	To Share Application A/c (On 48,000 shares @ Rs. 2 per share)	96,000
	To Share Allotment A/c (On 48,000 shares @ Rs. 5 per share—Rs. 3 on Capital A/c and Rs. 2 on Share Premium A/c)	2,40,000
	To Share First and Final Call A/c (On 48,000 Shares @ Rs. 5 per share)	2,40,000

Note : When you are asked in an examination question to record the transactions in the books of a company, cash/bank transactions would not be journalised but would be recorded in Cash Book.

Illustration 9. Star Ltd. offered to the public for subscription 1,00,000 shares of Rs. 10 each at a discount of 10% payable as follows :

On Application	Rs. 2
On Allotment	Rs. 3
On First and Final Call	Rs. 4

Applications were received for 90,000 shares which were duly accepted. All moneys due on Allotment and First and Final Call were received when due.

Record the above transactions relating to issue of shares in the books of the Company. The Company decides to write off Discount on Issue of Shares over a period of five years.

Solution :

JOURNAL

			Rs.	Rs.
	Share Application A/c Dr. To Share Capital A/c (Being entry for transfer of Share Application Money received on 90,000 equity shares @ Rs. 2 per share to Share Capital A/c)		1,80,000	1,80,000
	Share Allotment A/c Dr. Discount on Issue of Shares A/c Dr. To Share Capital A/c (Being entry for the amount due on Allotment on 90,000 shares @ Rs. 3 per share—Re. 1 per share being discount)		2,70,000 90,000	3,60,000
	Share First and Final Call A/c Dr. To Share Capital A/c (Being entry for the amount due on First and Final Call on 90,000 equity shares @ Rs. 4 per share)		3,60,000	3,60,000

Dr. CASH BOOK (BANK COLUMN)

		Rs.
	To Share Application A/c (On 90,000 shares @ Rs. 2 per share)	1,80,000
	To Share Allotment A/c (On 90,000 Shares @ Rs. 3 per share)	2,70,000
	To Share First and Final Call A/c (On 90,000 Shares @ Rs. 4 per share)	3,60,000

Dr. DISCOUNT ON ISSUE OF SHARES ACCOUNT Cr.

		Rs.			Rs.
I Year	To Share Capital A/c	90,000	I Year	By Profit & Loss A/c	18,000
				By Balance c/d	72,000
		90,000			90,000
II Year	To Balance b/d	72,000	II Year	By Profit & Loss A/c	18,000
				By Balance c/d	54,000
		72,000			72,000
III Year	To Balance b/d	54,000	III Year	By Profit & Loss A/c	18,000
				By Balance c/d	36,000
		54,000			54,000
IV Year	To Balance b/d	36,000	IV Year	By Profit & Loss A/c	18,000
				By Balance c/d	18,000
		36,000			36,000
V Year	To Balance b/d	18,000	V Year	By Profit & Loss A/c	18,000

The balance of Discount on Issue of Shares Account is shown under the heading 'Miscellaneous Expenditure' on the assets side of the Balance Sheet.

OVER-SUBSCRIPTION

When a company receives applications for a larger number of shares than it has offered to the public for subscription, it is said that the issue has been *over-subscribed*. In such a case the company will allot only that number of shares which it has offered to the public for subscription. The company may adopt either of the following two methods for allotment :

1. It may allot shares on *pro rata* basis. This means the shares to be allotted are proportionately distributed among the applicants. An example will make the point clear. Suppose a company offers to the public for subscription 10,000 Equity Shares. It receives applications for 20,000 shares. If allotment is done on *pro rata* basis, every applicant for 2 shares will be allotted one share.

When an applicant is allotted a smaller number of shares than he has applied for, the excess amount received from him is adjusted towards allotment and calls. But still if there is some surplus amount, it is returned to the applicant. The entries will be explained in the second method of allotment.

2. The company may allot shares in whatever manner it thinks proper. It may not allot any share to some applicants, whereas to some applicants it may allot the number of shares they have applied for. To some other applicants, it may allot a smaller number of shares than they have

applied for. Now a days, a company has to evolve a scheme of allotment in consultation with the authorities of the concerned stock exchange and allot the shares accordingly.

If an applicant is not allotted any share, his application money is returned. The Journal Entry in that case is as follows :

Share Application A/c Dr.
To Bank A/c
(Being return of Application Money to applicants for......shares who have not been allotted any share)

If an applicant is allotted the number of shares he has applied for, no difficulty arises. But if some applicants are allotted a smaller number of shares than they have applied for, the excess of application money is applied towards any payment due on allotment and calls. The excess amount can be adjusted against calls only when there is a specific provision to this effect in the terms of issue of shares. Any surplus amount which cannot under the terms of issue of shares be adjusted is returned.

In case the company allots shares in an arbitrary manner as discussed above, it is advisable to prepare the following chart:

CHART showing adjustment of APPLICATION MONEY

Applicants	No. of shares applied for	No. of shares allotted	Application Money received	Adjusted towards			Returned
				Application	Allotment	First Call	
			Rs.	Rs.	Rs.	Rs.	Rs.

This chart will help a student a great deal in passing the entries which are as follows :

Bank A/c Dr.
To Share Application A/c
(Being receipt of Application Money on...shares @ Rs.......per share)

Share Application A/c Dr.
To Share Capital A/c
To Share Allotment A/c
To Share First Call A/c
To Bank A/c
(Being the entry for adjustment of Application Money towards capital, allotment, and first call, the surplus being returned)

On allotment, the company will receive the amount due on allotment *less* the amount already adjusted towards allotment. Likewise, it will receive the amount due on calls *less* the amount already adjusted towards the calls.

Illustration 10. X Ltd. is registered with a nominal capital of Rs. 1,00,000 divided into 10,000 shares of Rs. 10 each. It offered to the public for subscription 8,000 shares, payable as Rs. 2 on application, Rs. 3 on allotment, and the balance on a call when required by the company.

The Company received applications for 16,000 shares. The directors allotted the shares on *pro rata* basis. The Company receives all the money due on allotment and first and final call, except the first and final call on 100 shares held by A.

Pass the Journal entries in the books of the Company.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr.		32,000	
	To Share Application A/c			32,000
	(Being the amount received on 16,000 shares as Application Money @ Rs. 2 per share)			
	Share Application A/c Dr.		32,000	
	To Share Capital A/c			16,000
	To Share Allotment A/c			16,000
	(Being transfer of Application Money to Share Capital A/c, the surplus being transferred to Share Allotment A/c, as applicants for 16,000 shares have been allotted 8,000 shares on *pro rata* basis)			
	Share Allotment A/c Dr.		24,000	
	To Share Capital A/c			24,000
	(Being entry for the amount due on allotment @ Rs. 3 per share on 8,000 shares)			
	Bank A/c Dr.		8,000	
	To Share Allotment A/c			8,000
	(Being amount due on allotment received *less* Rs. 16,000 already received on account of allotment at the time of application)			
	Share First and Final Call A/c Dr.		40,000	
	To Share Capital A/c			40,000
	(Being entry for the amount due on First and Final Call @ Rs. 5 per share on 8,000 shares)			

			Rs.	Rs.
	Bank A/c Dr. To Share First and Final Call A/c (Being the amount received on First and Final Call on 7,900 shares)		39,500	39,500

Illustration 11. On 1st January, 1989 a limited company issued a prospectus inviting applications for 6,000 Equity Shares of Rs. 100 each, payable as Rs. 10 per share on application, Rs. 20 on allotment, Rs. 30 on first call, and Rs. 40 on second and final call.

On 10th January, 1989 the company received applications for 8,000 shares. On 15th January, applications for 1,200 shares were rejected and the money received on application was returned to them. On the same date applications for 5,200 shares were accepted in full and applicants for 1,600 shares were each allotted one-half of the number of shares applied for, and the excess application moneys were applied in reduction of amounts due on allotment. On 10th February, 1989 all amounts due on allotment were received.

The first call was made on 10th March, 1989 and the amount due was duly received on 17th March, 1989. The second and final call was made on 10th July, 1989 and was duly received on 17th July, 1989 with the exception of A, the holder of 100 shares, who did not pay this call.

The Company closes its books on 31st March.

Give Journal entries and prepare Cash Book and Ledger.

Solution :

CHART showing adjustment of APPLICATION MONEY

Applicants	No. of shares applied for	No. of shares allotted	Application Money received	Adjusted towards		Returned
				Application	Allotment	
			Rs.	Rs.	Rs.	Rs.
	1,200	—	12,000	—	—	12,000
	5,200	5,200	52,000	52,000	—	—
	1,600	800	16,000	8,000	8,000	—
	8,000	6,000	80,000	60,000	8,000	12,000

JOURNAL

1989			Rs.	Rs.
Jan. 15	Equity Share Application A/c Dr. To Equity Share Capital A/c To Equity Share Allotment A/c (Being the entry to transfer the Application Money due on 6,000 shares to Share Capital A/c and surplus to Share Allotment A/c as applicants of 1,600 shares are allotted only 800 shares)		68,000	60,000 8,000

Date	Particulars		L.F.	Rs.	Rs.
1989 Jan. 15	Equity Share Allotment A/c	Dr.		1,20,000	
	To Equity Share Capital A/c				1,20,000
	(Being the amount due on allotment of 6,000 shares @ Rs. 20 per share)				
Mar. 10	Equity Share First Call A/c	Dr.		1,80,000	
	To Equity Share Capital A/c				1,80,000
	(Being entry for the amount due on first call on 6,000 shares @ Rs. 30 per share)				
July 10	Equity Share Second and Final Call A/c	Dr.		2,40,000	
	To Equity Share Capital A/c				2,40,000
	(Being the amount due on second and final call on 6,000 shares @ Rs. 40 per share)				

Dr. **CASH BOOK (BANK COLUMNS)** Cr.

1989		Rs.	1989		Rs.
Jan. 10	To Equity Share Application A/c (Application Money received on 8,000 share @ Rs.10 per share)	80,000	Jan. 15	By Equity Share Application A/c (Application Money returned on 1,200 shares)	12,000
Feb. 10	To Equity Share Allotment A/c (Allotment Money received on 6,000 shares @ Rs. 20 per share *less* Rs. 8,000 already received.)	1,12,000		By Balance c/d	5,96,000
Mar. 17	To Equity Shares First Call A/c (First Call Money received on 6,000 shares @ Rs. 30 per share)	1,80,000			
July 17	To Equity Share Second and Final Call A/c (Second and Final Call Money received on 5,900 shares @ Rs. 40 per share)	2,36,000			
		6,08,000			6,08,000

LEDGER

EQUITY SHARE APPLICATION ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Jan. 15	To Bank	12,000	Jan. 10	By Bank	80,000
	To Equity Share Capital A/c	60.000			
	To Equity Share Allotment A/c	8,000			
		80,000			80,000

EQUITY SHARE ALLOTMENT ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Jan. 15	To Equity Share Capital A/c	1,20,000	Jan. 15	By Equity Share Application A/c	8,000
			Feb. 10	By Bank	1,12,000
		1,20,000			1,20,000

EQUITY SHARE FIRST CALL ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Mar. 10	To Equity Share Capital A/c	1,80,000	Mar.10	By Bank	1,80,000

EQUITY SHARE SECOND AND FINAL CALL ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
July 10	To Equity Share Capital A/c	2,40,000	July 17	By Bank	2,36,000
			1990 Mar. 31	By Balance c/d	4,000
		2,40,000			2,40,000

EQUITY SHARE CAPITAL ACCOUNT

Dr.					Cr.
1990		Rs.	1989		Rs.
Mar. 31	To Balance c/d	6,00,000	Jan. 15	By Equity Share Application A/c	60,000
			Jan. 15	By Equity Share Allotment A/c	1,20,000
			Mar. 10	By Equity Share First Call A/c	1,80,000
			Mar. 10	By Equity Share Second and Final Call A/c	2,40,000
		6,00,000			6,00,000

Illustration 12. Goodluck Co. Ltd. issued on 1st January, 1989, 5,000 Equity Shares of Rs. 10 each at a premium of Rs. 2 per share payable Rs. 2 per share on application, Rs. 5 on allotment including the premium, and the balance as and when the company required.

The Company received applications for 6,000 shares on 10th January, 1989. It rejected applications for 500 shares. To A who had applied for 1,000 shares, the company allotted only 500 shares. The other applications were allotted the full number of shares they had applied for. The allotment was done on 20th January, 1989. The allotment money was received on 10th February, 1989. The company did not make the call.

Pass Journal entries recording the above transactions.

Solution :

JOURNAL

1989			Rs.	Rs.
Jan. 10	Bank A/c Dr.		12,000	
	To Equity Share Application A/c			12,000
	(Being receipt of Application Money on 6,000 shares @ Rs. 2 per share)			
20	Equity Share Application A/c Dr.		12,000	
	To Equity Share Capital A/c			10,000
	To Equity Share Allotment A/c			1,000
	To Bank A/c			1,000
	(Being amount received on application adjusted towards Capital @ Rs. 2 per share on 5,000 shares, amount received on 1,000 shares adjusted partly towards Share Capital for 500 shares allotted, and amount returned to applicants of 500 shares who have not been allotted any share)			
	Equity Share Allotment A/c Dr.		25,000	
	To Equity Share Capital A/c			15,000
	To Equity Share Premium A/c			10,000
	(Being entry for the amount due on allotment @ Rs. 5 per share including Rs. 2 per share as premium)			
Feb.10	Bank A/c Dr.		25,000	
	To Equity Share Allotment A/c			25,000
	(Being receipt of amount due on allotment)			

Illustration 13. Raj Ltd. invited applications for 1,00,000 equity shares of Rs. 10 each on the following terms :

On Application	Rs. 3
On Allotment	Rs. 2
On First and Final Call	Rs. 5

Applications were received for 2,20,000 shares. It was decided :

(*i*) to refuse allotment to the applicants for 20,000 shares,

(*ii*) to allot 50% shares to A who has applied for 40,000 shares,

(*iii*) to allot in full to B who has applied for 20,000 shares,

(*iv*) to allot balance of the available shares *pro rata* among the other applicants, and

(*v*) to utilise excess application money in part payment of allotment and final call.

Give the journal entries to record the above transactions. The entire sum due on allotment and first call was duly received in full.

(*Adapted from All India SSCE, 1984*)

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr.		6,60,000	
	To Equity Share Application A/c			6,60,000
	(Being receipt of Application Money from sundry applicants on 2,20,000 equity shares @ Rs. 3 per share)			
	Equity Share Application A/c Dr.		6,60,000	
	To Equity Share Capital A/c			3,00,000
	To Equity Share Allotment A/c			1,60,000
	To Equity Share First and Final Call A/c			1,40,000
	To Bank			60,000
	(Being entry for transfer of Application Money received on 1,00,000 equity shares to Share Capital A/c @ Rs. 3 per share, the surplus being adjusted towards Allotment and First Call and returned)			
	Equity Share Allotment A/c Dr.		2,00,000	
	To Equity Share Capital A/c			2,00,000
	(Being entry for the amount due on Allotment on 1,00,000 equity shares @ Rs. 2 per share)			
	Bank A/c Dr.		40,000	
	To Equity Share Allotment A/c			40,000
	(Being receipt of amount due on Allotment *less* amount already received, *i.e.*, Rs. 2,00,000–Rs. 1,60,000)			
	Equity Share First and Final Call A/c Dr.		5,00,000	
	To Equity Share Capital A/c			5,00,000
	(Being entry for the amount due on First and Final Call on 1,00,000 equity shares @ Rs. 5 per share)			

	Particulars		Rs.	Rs.
	Bank A/c Dr.		3,60,000	
	To Equity Share First and Final Call A/c			3,60,000
	(Being receipt of amount due on First and Final Call *less* amount already received, *i.e.*, Rs. 5,00,000–Rs. 1,40,000)			

Working Note:

CHART showing adjustment of APPLICATION MONEY

Applicants	No. of shares applied for	No. of shares allotted	Application Money received	Adjusted towards Application	Allotment	First Call	Returned
			Rs.	Rs.	Rs.	Rs.	Rs.
Sundry	20,000	Nil	60,000				60,000
A	40,000	20,000	1,20,000	60,000	40,000	20,000	
B	20,000	20,000	60,000	60,000			
Others	1,40,000	60,000	4,20,000	1,80,000	1,20,000	1,20,000	
	2,20,000	1,00,000	6,60,000	3,00,000	1,60,000	1,40,000	60,000

The entry for adjustment of Share Application Money is given once again to explain how amounts from this Chart may be incorporated into the Journal Entry :

Equity Share Application A/c Dr.	6,60,000	
To Equity Share Capital A/c		3,00,000
To Equity Share Allotment A/c		1,60,000
To Equity Share First and Final Call A/c		1,40,000
To Bank A/c		60,000

SHARE APPLICATION AND ALLOTMENT BOOK AND SHARE CALL BOOKS

For recording details of Share Application and Share Allotment money, a book called Share Application and Allotment Book is maintained. Likewise, a Share Call Book is also maintained. The rulings of these books are given on the next page.

The information which these Books contain is evident from the columns of these Books.

SHARE APPLICATION AND ALLOTMENT BOOK

S. No.	Date of Application	Name of Applicant	Address	Occupation	No of shares applied for	Amt. paid on Application	Cash Book Folio	No of shares allotted	Number		Allotment Letter No.	Amount due on Allotment	Date of receipt of Allotment money	Amount returnable	Date of payment	Folio in Members' Register	Remarks
									From	To							
						Rs.						Rs.		Rs.			

SHARE CALL BOOK

S. No.	Name	Address	Folio in Members Register	No. of shares	First Call of Rs.......... per share due on.........			Second & Final Call of Rs ...per share due on...			Calls paid in advance				Remarks
					Amount due	Date of Receipt	Cash Book Folio	Amount due	Date of Receipt	Cash Book Folio	Amount	Date of Receipt	Cash Book Folio	Date Adjusted	
					Rs.			Rs.			Rs.				

CALLS IN ARREAR

The amounts which are not received by a company on allotment or calls are termed as calls in arrears. If, for example, a company has not received allotment money on 100 shares at the rate of Rs. 2 per share, Share Allotment Account would show a debit balance of Rs. 200. Likewise, if the company has not received first call at the rate of Rs. 3 per share on 200 shares, Share First Call Account would show a debit balance of Rs. 600. These amounts of Rs. 200 and Rs. 600 due on allotment and first call respectively are called calls in arrear. Usually, Share Allotment Account and Calls Accounts are closed by transfer to Calls in Arrear Account with the amounts not received. The entry for this is as follows :

Calls in Arrear Account Dr.
To Share Allotment Account
To Share First Call Account
(Being the amount due on allotment and first call not received transferred to Calls in Arrear Account)

Interest on Calls in Arrear. The Articles of a company generally contain a clause authorising the company to charge interest on calls in arrear from the day appointed for payment to the day of actual payment at a certain rate. If the company adopts Table A, it can charge interest at 5 per cent per annum, or at such lower rate as the Board of Directors may determine. The Board has also the discretion to waive payment of any such interest (Article 16 of Table A). Interest on calls in arrear will be received by the company along with the Allotment and Call Money.

The Journal Entry for Interest on Calls in Arrear say first Call) will be as follows :

Bank A/c Dr.
To First Call A/c
To Interest on Calls in Arrear A/c
(Being entry for receipt of First Call Money on......shares along with interest @ .... per cent per annum for .... months)

In practical system of accounting the above entry would appear on the debit side of Cash Book.

Illustration 14. Jewels Limited offered 2,00,000 equity shares of Rs. 10 each to public for subscription on 1st April, 1989, payable as follows :

Rs. 3 per share on Application payable by 31st May, 1989.

Rs. 3 per share on Allotment payable by 31st July, 1989.

Rs. 4 per share on First and Final Call payable by 30th September, 1989.

The Company received applications for 4,00,000 shares. To A who had applied for 40,000 shares, 10,000 shares were allotted. To B who had applied for 30,000 shares, 10,000 shares were allotted. To applicants for 80,000 shares, full number of shares they had applied for were allotted. The

applicants for 50,000 shares were not allotted any share. The remaining shares were allotted *pro rata* to the remaining applicants.

All the moneys due on Allotment and Call were received in time except that a shareholder holding 1,000 shares to whom shares were allotted on *pro rata* basis paid the Call on 31st December, 1989. Share Issue Expenses came to Rs. 15,050 and are paid on 13th August, 1989.

Prepare the Cash Book of the Company for the period ending on 31st December, 1989. The Company has adopted relevant provision of Table A as regards interest on Calls in Arrear.

Solution :

Dr. CASH BOOK (BANK COLUMNS) Cr.

1989		Rs.	1989		Rs.
May 31	To Share Application A/c (Application Money received on 4,00,000 equity shares @ Rs. 3 per share)	12,00,000	June 15	By Share Application A/c (Money returned to Applicants not allotted any share Rs. 1,50,000 A 20,000)	1,70,000
July 31	To Share AllotmentA/c (Allotment Money received on 2,00,000 equity shares @ Rs. 3 per share— Rs. 6,00,000 *Less* amount already received 3,60,000)	2,40,000	Aug. 13	By Share Issue Expenses	15,050
Sep. 30	To Share First and Final Call A/c (Call Money received on 2,00,000equity shares @ Rs. 4 per share Rs. 8,00,000 *Less* amount already received 70,000 — 7,30,000 *Less* amount not received 4,000)	7,26,000	Dec. 31	By Balance c/d	19,85,000

Contd.

Contd.

		Rs.			Rs.
1989 Dec. 31	To Share First and Final Call A/c (Received Final Call on 1,000 shares @ Rs. 4 per share) 4,000 To Interest on Calls in Arrear (on Rs. 4,000 @ 5% per annum for 3 months)	50			
		21,70,050			21,70,050

Working Notes:

(1) CHART showing adjustment of SHARE APPLICATION MONEY

Applicants	No. of shares applied for	No. of shares allotted	Application Money received	Adjusted towards			Returned
				Application	Allotment	First Call	
			Rs.	Rs.	Rs.	Rs.	Rs.
A	40,000	10,000	1,20,000	30,000	30,000	40,000	20,000
B	30,000	10,000	90,000	30,000	30,000	30,000	
Full	80,000	80,000	2,40,000	2,40,000			
	50,000	—	1,50,000				1,50,000
Remaining	2,00,000	1,00,000	6,00,000	3,00,000	3,00,000		
	4,00,000	2,00,000	12,00,000	6,00,000	3,60,000	70,000	1,70,000

(2) Amount received on Application : Rs. 12,00,000

Adjusted towards Application Money Rs. 6,00,000

Amount received on Allotment :

Due	Rs. 6,00,000
Less already received	3,60,000
	2,40,000

Amount received on call :

On Sept. 30

Due	Rs. 8,00,000
Less already received	70,000
	7,30,000
Less not received (1,000 × 4)	4,000
	7,26,000
On 31st Dec.	4,000
Amount returned	1,70,000

(3) Interest on Calls in Arrear has been worked out for 3 months (from 1st October, 1989 to 31st December, 1989) at the rate of 5% per annum as per the provision in Table A.

CALLS IN ADVANCE

Sometimes some shareholders may pay the full amount on shares even if it is not due at the time when it is paid, *i.e.*, they may pay some calls in advance. In such a case, the amount received, which is not actually due, is credited to Calls Received in Advance Account.

Interest on Calls in Advance. A company has the option to receive calls not yet made or due. It may also refuse to accept such amount or may return it if it is received along with application or allotment money or calls due. If the company decides to retain the amount, it may pay interest on such amount which is so advanced at a rate not exceeding 6 per cent from the date of payment to the date when the amount becomes presently payable. The company may pay interest at a rate higher than 6 per cent if it so decides in a general meeting (Article 18 of Table A). This interest is payable even if there are no profits and as such it is a charge against profits.

It should however be noted that a company can accept calls in advance only if it is so authorised by its Articles [Sec. 92 (1) of the Companies Act, 1956].

The Journal Entry for payment of interest on Calls in Advance will be as follows :

Interest on Calls in Advance A/c Dr.
To Bank A/c
(Being entry for payment of interest on Calls received in Advance on.........shares at ....% per annum for............months)

In practical system of accounting, the above entry will appear on the credit side of Cash Book.

Illustration 15. On 1st March, 1989 Sarla Limited offered to the public for subscription 1,00,000 equity shares of Rs. 10 each, payable as follows :

Rs. 2 on Application payable by 31st March, 1989.
Rs. 2 on Allotment payable by 30th June, 1989.
Rs. 3 on First Call payable by 30th September, 1989.
Rs. 3 on Second and Final Call payable by 31st December, 1989.

The Company received applications for 1,20,000 shares. It accepted applications for 1,00,000 shares and rejected other applications. The money was returned on rejected applications on 28th April, 1989. The Company made both the calls which it duly received with the exception of the following :

(1) A (a holder of 200 shares) paid the full amount along with Allotment Money.

(2) B (a holder of 300 shares) paid the full amount along with First Call Money.

(3) C (a holder of 400 shares) failed to pay the First Call. He, however, paid the First Call along with the Second and Final Call. The Company accepted the amount with interest.

The Company has adopted Table A for its Articles.

Prepare the Cash Book of the Company for the period ending on 31st December, 1989.

Solution :

Dr. CASH BOOK (BANK COLUMNS) Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Equity Share Application A/c (Application Money received on 1,20,000 equity share @ Rs. 2 per share)	2,40,000·00	Apr. 28	By Share Application A/c (Application Money on 20,000 shares returned)	40,000·00
June 30	To Equity Share Allotment A/c (Allotment Money received on 99,800 shares @ Rs. 2 per share and Rs. 8 per share on 200 shares)	2,01,200·00	Dec. 31	By Interest on Calls in advance (A—on Rs. 60 for 3 months Rs 9, and on Rs. 600 for 6 months Rs. 18 B— On Rs. 900 for 3 months Rs. 13·50)	40·50
Sept. 30	To Equity Share First Call A/c (First Call Money received on 99,100 shares @ Rs. 3 per share and on 300 shares @ Rs. 6 share)	2,99,100·00		By Balance c/d	9,99,974·50
Dec. 31	To Share Second & Final Call A/c (Final Call Money received on 99,500 share @ Rs. 3 per share)	2,98,500·00			
31	To Share First Call A/c (First Call Money received on 400 shares @ Rs.3 per share)	1,200·00			
	To Interest on Calls in Arrear (From C for 3 months on Rs. 1,200 @ 5% p.a.)	15·00			
		10,40,015·00			10,40,015·00

Working Notes :

(1) *Amount received on Allotment on 30th June, 1989 :*

On 99,800 shares @ Rs. 2 per share	Rs. 1,99,600
From A who pays the full amount @ Rs. 8 per share on 200 shares	1,600
	2,01,200

Amount received on First Call on 30th September, 1989:

On *99,100 shares @ Rs. 3 per share	Rs. 2,97,300
From B who pays the full amount @ Rs. 6 per share on 300 shares	1,800
	2,99,100

*99,100 shares have been calculated as follows :

Amount due on	1,00,000 shares
Less 200 shares of A who has already paid the full amount	200 shares
	99,800 shares
Less 300 shares of B who now pays the full amount	300
	99,500
Less 400 shares of C who defaults to pay	400
	99,100

Amount received on Second and Final Call on 31st December, 1989 :

On 99,500 shares (*i.e.*, 1,00,000 shares *less* 200 shares of A and 300 shares of B who have already paid) @ Rs. 3 per share	Rs.2,98,500.

Amount received on First Call on 31st December, 1989 :

From C (On 400 shares @ Rs. 3 per share) Rs. 1,200

(2) *Calculation of Interest on Calls in Arrear :*

From 1st October, 1989 to 31st December, 1989 (*i.e.*, 3 months) on 400 shares of C (Rs. 3 × 400), *i.e.*, on Rs. 1,200 @ 5% per annum as per the provisions of Table A.

$= \text{Rs. } 1{,}200 \times \frac{5}{100} \times \frac{3}{12} =$ Rs. 15

(3) *Calculation of Interest on Calls in Advance :*

A— On First Call of Rs. 600 (Rs. 3 × 200) for 3 months (*i.e.*, from 1st July, 1989 to 30th September, 1989) @ 6% per annum as per the provisions of Table A

$= \text{Rs. } 600 \times \frac{6}{100} \times \frac{3}{12} =$ Rs. 9

On Second and Final Call of Rs. 600 (Rs. 3 × 200) for 6 months (*i.e.*, from 1st July, 1989 to 31st December, 1989) @ 6% per annum as per the provisions of Table A

$= \text{Rs. } 600 \times \frac{6}{100} \times \frac{6}{12}$ Rs. 18

B—On Second and Final Call of Rs. 900 (Rs. 3 × 300) for 3 months (*i.e.*, from 1st October, 1989 to 31st December, 1989) @ 6% per annum as per the provisions of Table A

$= \text{Rs. } 900 \times \frac{6}{100} \times \frac{3}{12}$ Rs. 13·50

Rs. 40·50

FORFEITURE OF SHARES

If a shareholder fails to pay amount due on allotment or any call, the company may cancel his shares. This is called forfeiture of shares. This results in cancellation of share capital to the extent of the amount called on the shares which are forfeited.

The amount already received by the company on the shares which are forfeited is a gain from the point of view of the company.

The power to forfeit shares must be clearly provided in the Articles. And before the company forfeits the shares of any defaulting shareholder, it must give a minimum of 14 days' notice to the shareholder requiring him topay the amount which remains unpaid. The notice must state that if the payment of calls due is not made within a certain period, his shares shall be forfeited. If, in spite of this notice, the defaulting shareholder does not pay the calls dues, his shares may be forfeited by a resolution of the Board of Directors to that effect.

The effect of forfeiture is that the shareholder whose shares are forfeited ceases to be a member of the company and his name is removed from the Register of Members. The amount that he has already paid to the company now belongs to the company.

ACCOUNTING ENTRIES

The accounting entries on forfeiture of shares are as follows :

Forfeiture of shares issued at par

Share Capital A/c	Dr.	[No. of shares × Called-up value of each forfeited share]
To Shares Forfeited A/c		[Amount received on forfeited shares]
To Share Allotment A/c To Share First Call A/c To Share Second Call A/c		[Amount not received on allotment and calls made on forfeited shares]

(Being the entry on forfeiture of.........shares of Rs..........each, Rs.........per share called-up, for non-payment of......... Allotment Money,............First Call/Second Call, as per resolution of the Board dated......)

If the amounts due on Allotment, First Call, Second Call etc., have been transferred to Calls in Arrears Account , the above entry would be as follows :

Share Capital A/c	Dr.	[No. of shares × called up value of each forfeited share]
To Shares Forfeited A/c		[Amount received on forfeited shares]
To Calls in Arrear A/c		[Amount not received on forfeited shares]

Share Capital Account is debited with the called up value of shares and this must equal the amount received plus amount not received.

Illustration 16. Bright Limited had offered 50,000 equity shares of Rs. 10 each to public for subscription, payable as follows :

Re. 1 on application

Rs. 2 on allotment

Rs. 3 on first call

Rs. 4 on second and final call.

All the calls were made and duly received except from A holding 200 shares who failed to pay both the calls and B holding 500 shares who failed to pay the final call.

Pass Journal Entry on the forfeiture of shares of both A and B.

Solution:

JOURNAL

			Rs.	Rs.
	Equity Share Capital A/c Dr.		7,000	
	To Equity Shares Forfeited A/c			3,600
	To Equity Share First Call A/c			600
	To Equity Share Second and Final Call A/c			2,800
	(Being entry on forfeiture of 200 shares of A and 500 shares of B, fully called up, for non- payment by A of first call of Rs. 3 per share and second and final call of Rs. 4 per share and by B of second and final call of Rs. 4 per share, as per the resolution of the Board dated......)			

Illustration 17. Pass Journal Entry in Illustration 16 if the Company does not make the second and final call and forfeits A's shares for non-payment of first call.

Solution :

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			Rs.	Rs.
	Equity Share Capital A/c Dr.		1,200	
	To Equity Shares Forfeited A/c			600
	To Equity Share First Call A/c			600
	(Being entry on forfeiture of 200 shares of A, Rs. 6 per share called up, for non-payment of first call of Rs. 3 per share, as per the resolution of the Board dated.......)			

Forfeiture of shares issued at a premium

This may be discussed under two heads :

(1) *When share premium money has been received.*

The entry for forfeiture in such a case would be as follows :

Share Capital A/c	Dr.	[No. of shares × called up value of each forfeited share]
To Shares Forfeited A/c		[Amount received on the forfeited shares *less* share premium amount]
To Share Allotment A/c To Share Calls A/c		[Amount not received on Allotment and Calls made on the forfeited shares]

It should be noted that Shares Forfeited Account will be credited with the total amount received on shares which are being forfeited *less* amount received as share premium. There is no point in transferring from Share Premium Account the amount already received as share premium to Shares Forfeited Account. Both Share Premium Account and Shares Forfeited Account represent Capital profit.

(2) *When share premium money has not been received.*

The entry for forfeiture in such a case would be as follows :

Share Capital A/c	Dr.	[No. of shares × called up value of each forfeited share]
Share Premium A/c	Dr.	[Amount of share premium not received]
To Shares Forfeited A/c		[Amount received on the forfeited shares]
To Share Allotment A/c To Share Calls A/c		[Amount not received on Allotment and Calls made on the forfeited shares]

When Share Premium Account is debited, the amount of share premium not received is removed from the Share Premium Account and as such it shows the amount actually received.

Illustration 18. Pass Journal entries for forfeiture of shares in the following cases :

(*a*) A holds 200 shares of Rs. 10 each in X Ltd., payable Rs. 3 on application, Rs. 4 (including share premium of Re. 1) on allotment, Rs. 2 on first call and Rs. 2 on second and final call. The Company has not made the second and final call. The Company forfeits A's share for non-payment of first call.

(*b*) B is a holder of 300 shares in the above Company. His shares are forfeited for non-payment of allotment and first call money.

Solution :

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				Rs.	Rs.
(*a*)	Share Capital A/c	Dr.		1,600	
	To Shares Forfeited A/c				1,200
	To Share First Call A/c				400
	(Being entry on forfeiture of 200 shares of A, called up value Rs. 8 per share, for non-payment of First Call of Rs. 2 per share as per resolution of the Board dated......)				

			Rs.	Rs.
(b)	Share Capital A/c Dr.		2,400	
	Share Premium A/c Dr.		300	
	To Shares Forfeited A/c			900
	To Share Allotment A/c			1,200
	To Share First Call A/c			600
	(Being entry on forfeiture of 300 shares of B, called up value Rs. 8 per share, premium of Re. 1 payable on allotment, for non-payment of Allotment Money of Rs. 4 (including premium of Re. 1) per share and first call of Rs. 2 per share, as per resolution of the Board dated......)			

Illustration 19. Mohan Limited has authorised capital of Rs. 5,00,000 divided into 50,000 shares of Rs. 10 each. The company issued a prospectus inviting applications for 30,000 shares of Rs. 10 each at a premium of Rs. 2 per share, payable as follows :

On application Rs. 2

On allotment Rs. 5 (including premium)

On first call Rs. 3

On second and final call Rs. 2.

The company received applications for 45,000 shares and *pro rata* allotment was made in respect of applicants of 40,000 shares and the remaining applications were rejected. Money overpaid on applications was employed on account of sum due on allotment. All the calls were made.

B, to whom 300 shares were allotted, failed to pay the two calls.

C, to whom 600 shares were allotted, failed to pay the allotment money and the two calls.

The company decided to forfeit the shares of both B and C,

Pass the journal entries in the books of the company and prepare the opening balance sheet. *(Adapted from All India SSCE, 1980)*

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr.		90,000	
	To Share Application A/c			90,000
	(Being receipt of Application Money on 45,000 shares of Rs. 10 each, @ Rs. 2 per share)			

		Rs.	Rs.
Share Application A/c Dr. To Share Capital A/c To Share Allotment A/c To Bank A/c (Being entry for transfer of Share Application Money to Share Capital A/c — 30,000 shares @ Rs. 2 per share — the excess of Rs. 20,000 adjusted towards Allotment A/c because of allotment of 30,000 shares on *pro rata* basis to applicants for 40,000 shares and refund of Application Money to applicants of 5,000 shares)		90,000	 60,000 20,000 10,000
Share Allotment A/c Dr. To Share Capital A/c To Share Premium A/c (Being entry for the amount due on Allotment on 30,000 shares @ Rs. 5 per share, Rs. 3 on Capital A/c and Rs. 2 on Share Premium A/c)		1,50,000	 90,000 60,000
Bank A/c Dr. To Share Allotment A/c (Being receipt of Allotment Money Rs. 1,50,000 *less* amount of Rs. 20,000 already received and amount not received from C on 600 shares, Rs. 2,600, *i.e.*, Rs. 3,000 minus excess Rs. 400 received with application)		1,27,400	 1,27,400
Share First Call A/c Dr. To Share Capital A/c (Being entry for the amount due on First Call on 30,000 shares @ Rs. 3 per share)		90,000	 90,000
Bank A/c Dr. To Share First Call A/c (Being receipt of First Call Money on 29,100 shares @ Rs. 3 per share— B not paying on 300 shares and C not paying on 600 shares)		87,300	 87,300
Share Second & Final Call A/c Dr. To Share Capital A/c (Being entry for the amount due on Second & Final Call on 30,000 shares @ Rs. 2 per share)		60,000	 60,000

			Rs.	Rs.
	Bank A/c Dr.		58,200	
	To Share Second & Final Call A/c			58,200
	(Being receipt of Second & Final Call Money on 29,100 shares @ Rs. 2 per share — B not paying on 300 shares and C not paying on 600 shares)			
	Share Capital A/c Dr.		3,000	
	To Shares Forfeited A/c			1,500
	To Share First Call A/c			900
	To Share Second & Final Call A/c			600
	(Being entry on Forfeiture of 300 shares of B, fully called up, for non-payment of First Call of Rs. 3 per share and Second & Final Call of Rs. 2 per share as per resolution of the Board dated.......)			
	Share Capital A/c Dr.		6,000	
	Share Premium A/c Dr.		1,200	
	To Shares Forfeited A/c			1,600
	To Share Allotment A/c			2,600
	To Share First Call A/c			1,800
	To Share Second & Final Call A/c			1,200
	(Being entry on forfeiture of 600 shares of C, fully called up, for non-payment of part Allotment Money (including premium of Rs. 2 per share), First Call of Rs. 3 per share and Second & Final Call of Rs. 2 per share as per resolution of the Board dated ....)			

BALANCE SHEET of MOHAN LIMITED

Liabilities	Rs.	Assets	Rs.
SHARE CAPITAL :		CURRENT ASSETS	
Authorised		Balance at Bank	3,52,900
50,000 shares of Rs. 10 each	5,00,000		
Issued			
30,000 shares of Rs. 10 each	3,00,000		
Subscribed			
29,100 shares of Rs. 10 each Rs. 2,91,000			
Add Forfeited Shares 3,100	2,94,100		
RESERVES AND SURPLUS			
Share Premium A/c	58,800		
	3,52,900		3,52,900

Working Notes :

(1) Note that on forfeiture of B's shares, Share Premium Account has not been debited with the premium amount. This is because share premium has been received.

(2) In the case of forfeiture of C's Share, the amounts credited to Shares Forfeited Account and Share Allotment Account have been calculated as follows :

Shares Forfeited Account Rs. 1,600 :

C was allotted 600 shares. As applicants for 40,000 shares were allotted 30,000 shares on *pro rata* basis, C must have applied for $\frac{600 \times 40,000}{30,000}$, *i.e.*, 800 shares. This means he paid Rs. 1,600 (800 shares applied for × Rs. 2) as Application Money. Since this is the only money he has paid, this has been credited to Shares Forfeited Account.

Share Allotment Account Rs. 2,600 :

	Rs.
Amount due on Allotment (600 shares × Rs. 5)	3,000
Less excess amount of Application Money adjusted towards Allotment (*i.e.* Rs. 1,600 paid as Application Money — Rs. 1,200 due as Application Money)	400
Amount not received on Allotment	2,600

(3) Note the form of Balance Sheet carefully. It has to be this way. This is the form as given in Schedule VI of the Companies Act, 1956.

Forfeiture of shares issued at a discount

When shares which had been issued at a discount are forfeited, the following entry is passed :

Share Capital A/c	Dr.	[No. of shares × called up value of forfeited shares with which the Share Capital A/c was credited]
To Shares Forfeited A/c		[Amount received on the forfeited shares]
To Share Allotment A/c To Share Calls A/c		[Amount not received on Allotment and Calls on the forfeited shares]
To Discount on Issue of Shares A/c		[Amount of discount]

Illustration 20. Next Ltd. offered to the public for subscription 1,00,000 shares of Rs. 10 each at a discount of Re. 1 per share payable as follows :

Rs. 2 on application
Rs. 3 on allotment
Rs. 4 on first and final call.

The Company received applications for 2,13,000 shares. The allotment was made as follows :

Applicants	No. of Shares applied for	No. of Shares allotted	
A	2,000	1,500	
B	3,000	2,500	
Sundry	50,000	50,000	
Sundry	92,000	46,000	(*on pro rata basis*)
Sundry	66,000	Nil	
	2,13,000	1,00,000	

The Company received the amount due on Allotment and First and Final Call except that

(1) A failed to pay the Call Money ;

(2) B failed to pay the Allotment and Call Money ;

(3) C, a holder of 2,000 shares, failed to pay the Allotment and Call Money. He is one of the shareholders to whom allotment was made on *pro rata* basis ;

(4) D, a holder of 3,000 shares, to whom full allotment was made, failed to pay the Allotment and Call Money ;

(5) E, a holder of 4,000 shares, to whom full allotment was made, paid the First and Final Call Money along with Allotment Money.

The Company decided to forfeit the shares of A, B, C and D.

Journalise the above transactions, showing separate entries for forfeiture of shares of A, B, C and D.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr.		4,26,000	
	To Share Application A/c			4,26,000
	(Being receipt of Application Money on 2,13,000 shares @ Rs. 2 per share)			
	Share Application A/c Dr.		4,26,000	
	To Share Capital A/c			2,00,000
	To Share Allotment A/c			94,000
	To Bank			1,32,000
	(Being entry for transfer of Application Money to Share Capital — the excess adjusted towards Allotment Money — A Rs. 1,000, B Rs. 1,000, *pro rata* allottees Rs. 92,000, and refund to applicants of 66,000 shares who are refused allotment)			

		Rs.	Rs.
Share Allotment A/c Dr Discount on Issue of Shares A/c Dr To Share Capital A/c (Being entry for amount due on Allotment @ Rs.3 per share, Re. 1 per share being discount)		3,00,000 1,00,000	 4,00,000
Bank A/c Dr. To Share Allotment A/c To Share First and Final Call A/c (Being receipt of Allotment Money, and First and Final Call of Rs. 4 per share received in advance from E , holder of 4,000 shares)		2,04,500	 1,88,500 16,000
Share First and Final Call A/c Dr. To Share Capital A/c (Being entry for amount due on 1,00,000 share @ Rs. 4 per share)		4,00,000	 4,00,000
Bank A/c Dr. To Share First and Final Call A/c (Being receipt of First and Final Call Money on 87,000 shares @ Rs. 4 per share ; A, B C and D holding 1,500, 2,500, 2,000 and 3,000 shares respectively having defaulted and E holding 4,000 shares having already paid this call along with Allotment Money)		3,48,000	 3,48,000

Entries on forfeiture of Shares

		Rs.	Rs.
Share Capital A/c Dr. To Shares Forfeited A/c To Share First and Final Call A/c To Discount on Issue of Shares A/c (Being entry on forfeiture of 1,500 shares of A, fully called, for default in paying First and Final Call, Discount on Issue debited earlier, now credited)		15,000	 7,500 6,000 1,500
Share Capital A/c Dr. To Shares Forfeited A/c To Share Allotment A/c To Share First and Final Call A/c To Discount on Issue of Shares A/c (Being entry on forfeiture of 2,500 shares of B, fully called, for default in paying part Allotment Money and First and Final Call of Rs. 4 per share, Discount on Issue of shares debited earlier, is now credited)		25,000	 6,000 6,500 10,000 2,500

		Rs.	Rs.
Share Capital A/c Dr.		20,000	
To Shares Forfeited A/c			8,000
To Share Allotment A/c			2,000
To Share First and Final Call A/c			8,000
To Discount on Issue of Shares A/c			2,000
(Being entry on forfeiture of 2,000 shares of C, fully called, for default in paying part Allotment Money and First and Final Call of Rs. 4 per share. Discount on Issue of these shares debited earlier, is now credited)			
Share Capital A/c Dr.		30,000	
To Shares Forfeited A/c			6,000
To Share Allotment A/c			9,000
To Share First and Final Call A/c			12,000
To Discount on Issue of Shares A/c			3,000
(Being entry on forfeiture of 3,000 shares of D, fully called, for default in paying Allotment Money of Rs. 3 per share and First and Final Call of Rs. 4 per share. Discount on Issue of these shares debited earlier, is now credited)			

Working Notes :

(1) CHART showing adjustment of APPLICATION MONEY

Applicants	No. of shares applied for	No. of shares allotted	Application Money received	Adjusted towards		Returned
				Application	Allotment	
			Rs.	Rs.	Rs.	
A	2,000	1,500	4,000	3,000	1,000	
B	3,000	2,500	6,000	5,000	1,000	
Pro rata allottees						
C	4,000	2,000	8,000	4,000	4,000	
Others	88,000	44,000	1,76,000	88,000	88,000	
Full allottees						
D	3,000	3,000	6,000	6,000		
Others	47,000	47,000	94,000	94,000		
Those rejected	66,000	—	1,32,000			1,32,000
	2,13,000	1,00,000	4,26,000	2,00,000	94,000	1,32,000

(2) CHART showing ALLOTMENT MONEY due, received at the time of application, received in cash and amount not received

Applicants	No. of shares held	Amount due on allotment	Amount already* received	Amount received on allotment	Amount not received
		Rs.	Rs.	Rs.	Rs.
A	1,500	4,500	1,000	3,500	—
B	2,500	7,500	1,000	—	6,500
C	2,000	6,000	4,000	—	2,000
D	3,000	9,000	—	—	9,000
E	4,000	12,000	—	12,000	—
Other *pro rata* allottees	44,000	1,32,000	88,000	44,000	—
Other full allottees	43,000	1,29,000	—	1,29,000	—
	1,00,000	3,00,000	94,000	1,88,500	17,500

*Refer to Chart showing adjustment of Application Money.

Important points to be noted on forfeiture

1. Share Capital Account is, in all cases of forfeiture, debited with the called up value of the shares forfeited.

2. If forfeited shares had been issued at a premium, Share Premium Account is debited only if share premium *has not been received.* If it has been received, it is allowed to remain in Share Premium Account. As such Shares Forfeited Account is credited with the amount received on forfeited shares on *capital account* (*i.e.,* total amount received on forfeited shares *less* share premium amount).

3. If forfeited shares had been issued at a discount, Discount on Issue of Shares Account is credited with the amount of Discount debited at the time of issue.

RE-ISSUE OF FORFEITED SHARES

Forfeited shares may be re-issued on such terms as the Board of Directors thinks fit. These shares may have been originally issued—

(1) at par,

(2) at a premium which

(*a*) may have been received,

(*b*) may not have been received, or

(3) at a discount.

Now these forfeited shares may be re-issued—

(*a*) at par,

(*b*) at a premium, or

(*c*) at a discount.

(1) Re-issue of forfeited shares originally issued at par

(*a*) **Re-issue at par** (*i.e., at called up value*). If forfeited shares originally issued at par are re-issued at par, the following Journal Entry is passed :

Bank A/c	Dr.	(with amount received)
To Share Capital A/c		(with called up amount)
(Being the entry on re-issue of ......forfeited shares, Rs. ....per share called up, now re-issued at Rs. .... per share)		

Profit on re-issue of forfeited shares is transferred to Capital Reserve Account by means of the following Journal Entry :

Shares Forfeited A/c	Dr.	(with total amount forfeited)
To Capital Reserve A/c		
(Being the entry for transfer of profit on re-issue of ......forfeited shares to Capital Reserve Account)		

Illustration 21. A limited company issues 2,00,000 Shares of Rs. 10 each, payable as Rs. 2 on application, Rs. 2·50 on allotment, Rs. 3 on first call and Rs. 2·50 on second and final call. The company receives the amounts due on due dates with the exception of first call, and second and final call on 800 shares. These shares are forfeited for non-payment of calls and are subsequently re-issued at Rs. 10 per share fully paid up.

Pass the necessary entries regarding forfeiture and re-issue of the forfeited shares.

Solution :

JOURNAL

				Rs.	Rs.
	Share Capital A/c	Dr.		8,000	
	To Shares Forfeited A/c				3,600
	To Share First Call A/c				2,400
	To Share Second and Final Call A/c				2,000
	(Being the entry on forfeiture of 800 shares of Rs. 10 each, fully called up, for non-payment of first and second and final calls of Rs. 3 and Rs. 2·50 respectively, as per resolution of the Board dated......)				
	Bank A/c	Dr.		8,000	
	To Share Capital A/c				8,000
	(Being the entry on re-issue of 800 forfeited shares as fully paid up at Rs. 10 per share)				
	Shares Forfeited A/c	Dr.		3,600	
	To Capital Reserve A/c				3,600
	(Being the entry for transfer of profit on re-issue of 800 forfeited shares to Capital Reserve A/c)				

(*b*) **Re-issue at a premium** (*i.e., at more than called up value*). If forfeited shares originally issued at par are re-issued at a premium, the following Journal Entry is passed :

Bank A/c	Dr.	(with amount received)
To Share Capital A/c		(with called up amount)
To Share Premium A/c		(with amount of premium)
Being the entry on re-issue of ......forfeited shares, Rs. ...... per share called up, now issued at Rs. ......per share, including premium)		

Profit on re-issue of forfeited shares is transferred to Capital Reserve Account. The Journal Entry for this is as follows :

Shares Forfeited A/c	Dr.	(with total amount forfeited)
To Capital Reserve A/c		
(Being the entry for transfer of profit on re-issue of...... forfeited shares to Capital Reserve A/c)		

Illustration 22. Artica Ltd. had offered 50,000 shares of Rs. 10 each, payable as Re. 1 on application, Rs. 2 on allotment, Rs. 3 on first call and Rs. 4 on second and final call. The issue was fully subscribed. The Company made the first call two months after allotment. The amount due on first call was duly received except on 200 shares held by A. After the necessary formalities, these shares were forfeited and subsequently re-issued at Rs. 8 per share (including a premium of Rs. 2).

Pass Journal Entries for forfeiture and re-issue of these 200 shares of A.

Solution :

JOURNAL

			Rs.	Rs.
	Share Capital A/c Dr.		600	
	To Shares Forfeited A/c			300
	To Share First Call A/c			300
	(Being the entry on forfeiture of 200 shares of Rs. 10 each of A, called up amount Rs. 6 per share, for non-payment of First Call of Rs. 3 per share, as per resolution of the Board, dated......)			
	Bank A/c Dr.		800	
	To Share Capital A/c			600
	To Profit on Re-issue of Forfeited Shares A/c			200
	(Being the entry on receipt of money on re-issue of 200 forfeited shares, Rs. 6 called up, at Rs. 8 per share)			
	Profit on Re-issue of Foreited Shares A/c Dr.		200	
	Shares Forfeited A/c Dr.		300	
	To Capital Reserve A/c			500
	(Being the entry for transfer of profit on re-issue of 200 forfeited shares to Capital Reserve A/c)			

(*c*) **Re-issue at a discount** (*i.e., at less than called up value*). If forfeited shares originally issued at par are re-issued at a discount, the following Journal Entry is passed :

Bank A/c	Dr.	(Amount received)
Shares Forfeited A/c	Dr.	(Amount allowed as discount)
To Share Capital A/c		(Called up value at the time when the shares are re-issued)
(Being the entry on re-issue of...... forfeited shares, Rs.......per share called-up, Rs..........per share being allowed as discount)		

It should be clearly understood that the amount of discount allowed on re-issue of forfeited shares should not exceed the amount already received on these shares (*i.e.*, the amount which stands credited to Shares Forfeited Account). A further additional discount upto a maximum of ten per cent may be allowed if formalities under Sec. 79 (which deals with issue of shares at a discount) have been complied with.

Illustration 23. A limited company issued 1,00,000 shares of Rs. 10 each, payable as Rs. 2 on Application, Rs. 3 on Allotment, Rs. 2 on First Call and Rs. 3 on Second and Final Call. The Company does not make the Second and Final Call. It receives the amounts on due dates with the exception of First Call on 500 shares. These shares are forfeited for non-payment of the Call. Subsequently the Company issues 300 of these shares at Rs. 6 per share.

Pass the necessary Journal entries as to forfeiture and re-issue.

Solution :

JOURNAL

			Rs.	Rs.
	Share Capital A/c Dr.		3,500	
	To Shares Forfeited A/c			2,500
	To Share First Call A/c			1,000
	(Being the entry on forfeiture of 500 shares of Rs. 10 each, Rs. 7 per share called up, for non-payment of First Call of Rs. 2 per share, as per resolution of the Board, dated......)			
	Bank A/c Dr.		1,800	
	Shares Forfeited A/c Dr.		300	
	To Share Capital A/c			2,100
	(Being the entry on receipt of money on re-issue of 300 forfeited shares, Rs. 7 per share called up, at Rs. 6 per share, Re. 1 per share being discount)			

			Rs.	Rs.
	Shares Forfeited A/c Dr. To Capital Reserve A/c (Being the entry for transfer of profit on re-issue of 300 forfeited shares to Capital Reserve A/c)		1,200	1,200

Note: Shares Forfeited Account shows a credit balance of Rs. 1,000. This is proportionate amount on account of 200 forfeited shares which have not been re-issued by the Company.

Illustration 24. Raju Enterprises Ltd. offered to the public for subscription 50,000 shares of Rs. 10 each at a premium of Rs. 2 per share payable as follows :

Rs. 3 on application,
Rs. 4 on allotment (including premium),
Rs. 3 on first call, and
Rs. 2 on second and final call.

Applications were received for 70,000 shares. The applications for 20,000 shares were rejected. Other applicants were allotted the number of shares they had applied for.

Rajiv to whom 2,000 shares were allotted failed to pay the allotment money and on his subsequent failure to pay the first call his shares were forfeited.

Rajni to whom 4,000 shares were allotted failed to pay the two calls and her shares were forfeited after the second call. These shares were re-issued as fully paid at Rs. 8·50 per share.

Record these transactions in the books of the Company.

Solution :

Dr. CASH BOOK (BANK COLUMNS) Cr.

	Rs.		Rs.
To Share Application A/c (@ Rs. 3 per share on 70,000 shares)	2,10,000	By Share Application A/c (Return of Application Money on 20,000 shares)	60,000
To Share Allotment A/c (@ Rs. 4 per share on 48,000 shares)	1,92,000	By Balance c/d	5,96,000
To Share First Call A/c (@ Rs. 3 per share on 44,000 shares)	1,32,000		
To Share Second and Final Call A/c (@ Rs. 2 per share on 44,000 shares)	88,000		
To Share Capital A/c (@ Rs. 8·50 per share on 4,000 forfeited shares now re-issued as fully paid)	34,000		
	6,56,000		6,56,000

JOURNAL

Particulars	L.F.	Rs.	Rs.
Share Application A/c Dr.		1,50,000	
To Share Capital A/c			1,50,000
(Being the entry for transfer of Share Application Money received on 50,000 shares @ Rs. 3 per share to Share Capital A/c, allotted on.........as per Directors' resolution No.......dated.........)			
Share Allotment A/c Dr.		2,00,000	
To Share Capital A/c Dr.			1,00,000
To Share Premium A/c			1,00,000
(Being the entry for amount due on allotment @ Rs. 4 per share, Rs. 2 per share being premium on 50,000 shares allotted as per Directors' resolution No....... dated......)			
Share First Call A/c Dr.		1,50,000	
To Share Capital A/c			1,50,000
(Being the entry for amount due on first call @ Rs. 3 per share on 50,000 shares as per Directors' resolution No.......dated......)			
Share Capital A/c Dr.		16,000	
Share Premium A/c Dr.		4,000	
To Shares Forfeited A/c			6,000
To Share Allotment A/c			8,000
To Share First Call A/c			6,000
(Being the entry on forfeiture of 2,000 shares of Rajiv, Rs. 8 per share called up, for non-payment of allotment money (Rs. 4 which includes premium of Rs. 2) and first call, as per Directors' resolution No....... dated.........)			
Share Second and Final Call A/c Dr.		96,000	
To Share Capital A/c			96,000
(Being the entry for amount due on second and final call @ Rs. 2 per share on 48,000 shares, as per Directors' resolution No......dated......)			
Share Capital A/c Dr.		40,000	
To Shares Forfeited A/c			20,000
To Share First Call A/c			12,000
To Share Second and Final Call A/c			8,000
(Being the entry on forfeiture of 4,000 shares of Rajni)			

			Rs.	Rs.
	Shares Forfeited A/c Dr. To Share Capital A/c (Being the entry for discount allowed on re-issue of 4,000 forfeited shares as per Directors' resolution No......dated......)		6,000	6,000
	Shares Forfeited A/c Dr. To Capital Reserve A/c (Being the entry for transfer of profit on re-issue of 4,000 forfeited shares of Rajni to Capital Reserve A/c)		14,000	14,000

Illustration 25. On 10th July, 1989, Sandesh Limited issued 20,000 shares of Rs. 10 each, payable as Re. 1 on application, Rs. 2·50 on allotment, Rs. 3 on first call and the balance on second and final call.

The Company received applications for 50,000 shares on 25th July, 1989. It went to allotment on 1st August. Applications for 20,000 shares were rejected altogether, applicants for 20,000 shares were allotted 10,000 shares, other applicants were allotted the number of shares they had applied for. Surplus money received on applications was adjusted towards allotment. The rejected applicants were returned the application money. Allotment money was duly received on 20th August.

The Company made first call on 10th October and received the money on 20th October. One shareholder holding 2,000 shares failed to pay the call. The Company decided to forfeit these shares on 15th November. All the legal formalities were complied with. The Company re-issued these shares on 1st December at Rs. 4·80 per share.

Journalise the above transactions and show ledger accounts. How would the above items appear in the Balance Sheet as on 31st December, 1989 ?

Solution :

JOURNAL

1989			Rs.	Rs.
July 25	Bank A/c Dr. To Share Application A/c (Being receipt of Application Money from sundry applicants on 50,000 Shares @ Re. 1 per share)		50,000	50,000
Aug.1	Share Application A/c Dr. To Share Capital A/c To Share Allotment A/c To Bank A/c (Being allotment of 20,000 Shares as follows : Applicants for 20,000 shares allotted 10,000 shares, surplus money adjusted towards Allotment, applicants for 10,000 shares allotted 10,000 shares, and applicants for 20,000 shares rejected)		50,000	20,000 10,000 20,000

1989			Rs.	Rs.
Aug.1	Share Allotment A/c Dr. To Share Capital A/c (Being amount due on Allotment on 20,000 Shares @ Rs. 2·50 per share)		50,000	50,000
Aug.20	Bank A/c Dr. To Share Allotment A/c (Being receipt of Allotment Money on 20,000 shares @ Rs. 2·50 per share *less* Rs. 10,000 already received)		40,000	40,000
Oct.10	Share First Call A/c Dr. To Share Capital A/c (Being amount due on First Call on 20,000 Shares @ Rs. 3 per share)		60,000	60,000
Oct.20	Bank A/c Dr. To Share First Call A/c (Being receipt of First Call Money on 18,000 shares @ Rs. 3 per share)		54,000 54,000	
Nov.15	Share Capital A/c Dr. To Shares Forfeited A/c Dr. To Share First Call A/c (Being the entry for forfeiture of 2,000 shares on non-receipt of First Call as per resolution of the Board dated......)		13,000	7,000 6,000
Dec.1	Bank A/c Dr. Shares Forfeited A/c Dr. To Share Capital A/c (Being amount received on re-issue of 2,000 forfeited shares @ Rs. 4·80 per share, as Rs. 6·50 per share paid up)		9,600 3,400	13,000
Dec.1	Shares Forfeited A/c Dr. To Capital Reserve A/c (Being transfer of Profit on forfeited shares to Capital Reserve A/c)		3,600	3,600

LEDGER

SHARE APPLICATION ACCOUNT

Dr.					Cr.
1989		Rs.	1989		Rs.
Aug.1	To Share Capital A/c	20,000	July 25	By Bank	50,000
	To Share Allotment A/c	10,000			
	To Bank	20,000			
		50,000			50,000

Dr. SHARE ALLOTMENT ACCOUNT Cr.

1989		Rs.	1989		Rs.
Aug.1	To Share Capital A/c	50,000	Aug. 1	By Share Application A/c	10,000
			20	By Bank A/c	40,000
		50,000			50,000

Dr. SHARE FIRST CALL ACCOUNT Cr.

1989		Rs.	1989		Rs.
Oct. 10	To Share Capital A/c	60,000	Oct. 20	By Bank	54,000
			Nov. 15	By Share Capital A/c	6,000
		60,000			60,000

Dr. SHARE CAPITAL ACCOUNT Cr.

1989		Rs.	1989		Rs.
Nov.15	To Shares Forfeited A/c	7,000	Aug. 1	By Share Application A/c	20,000
15	To Share First Call A/c	6,000	1	By Share Allotment A/c	50,000
Dec.31	To Balance c/d	1,30,000	Oct. 1	By Share First Call A/c	60,000
			Dec. 1	By Bank A/c	9,600
				By Shares Forfeited A/c	3,400
		1,43,000			1,43,000

Dr. BANK ACCOUNT Cr.

1989		Rs.	1989		Rs.
July 25	To Share Application A/c	50,000	Aug. 1	By Share Application A/c	20,000
Aug. 1	To Share Allotment A/c	40,000	Dec. 31	By Balance c/d	1,33,600
Oct. 20	To Share First Call A/c	54,000			
Dec. 1	To Share Capital A/c	9,600			
		1,53,600			1,53,600

SHARES FORFEITED ACCOUNT

Dr.		Rs.			Cr. Rs.
1989			1989		
Dec. 1	To Share Capital A/c	3,400	Nov. 15	By Share Capital A/c	7,000
1	To Capital Reserve A/c (transfer)	3,600			
		7,000			7,000

BALANCE SHEET of SANDESH LIMITED

as on 31st December, 1989

Liabilities	Rs.	*Assets*	Rs.
SHARE CAPITAL :		CURRENT ASSETS :	
Authorised : ......Shares of Rs. 100 each		Bank	1,33,600
Issued and Subscribed : 20,000 Shares of Rs. 10 2,00,000			
Called up : 20,000 Shares of Rs. 10 each, Rs. 6·5 per Share called up	1,30,000		
RESERVES AND SURPLUS:			
Capital Reserve	3,600		
	1,33,600		1,33,600

(2) Re-issue of forfeited shares originally issued at a premium

(*a*) **Re-issue at par** (*i.e., at called up value*). If forfeited shares originally issued at a premium are re-issued at par, the following Journal Entries are passed :

(*i*) *If premium had been received :*

Bank A/c	Dr.	(with amount received)
To Share Capital A/c		(with called up amount)
(Being the entry for receipt of money on re-issue of ......forfeited shares, Rs.......per share called up, now re-issued at Rs......per share)		

(*ii*) *If premium had not been received :*

Same entry as above.

Profit on re-issue of forfeited shares (*i.e.*, balance of Shares Forfeited Account will be transferred the Capital Reserve Account).

Illustration 26. Bright Star Ltd. offered to the public 5,00,000 shares of Rs. 10 each at a premium of Rs. 3 per share, payable as follows :

Rs. 2 on application.

Rs. 3 (including premium of Re. 1) on allotment

Rs. 4 (including premium of Re. 1) on first call

Rs. 4 (including premium of Re. 1) on second and final call.

The Company received applications for 8,00,000 shares. It rejected applications for 2,00,000 shares and made *pro rata* allotment to remaining applicants. The company received amount due on calls with the exception of—

(*i*) First call on 200 shares held by A whose shares were immediately forfeited for non-payment of this call ;

(*ii*) Second and Final call on 300 shares held by B whose shares were forfeited for non-payment of this call.

The forfeited shares were re-issued immediately after forfeiture as follows:

Shares of A at Rs. 7 per share to C.

Shares of B at Rs. 10 per share to D.

Pass Journal Entries to record the above transactions in the books of the Company.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To Share Application A/c (Being receipt of Application Money on 8,00,000 shares @ Rs. 2 per share)		16,00,000	16,00,000
	Share Application A/c Dr. To Share Capital A/c To Share Allotment A/c To Bank A/c (Being the entry for transfer of Application Money to Share Capital A/c and adjustment of excess money to Allotment and return of Application Money to applicants for 2,00,000 shares not allotted any share)		16,00,000	10,00,000 2,00,000 4,00,000

		Rs.	Rs.
Share Allotment A/c Dr. To Share Capital A/c To Share Premium A/c (Being the entry for amount due on allotment of 5,00,000 shares @ Rs. 3 per share, Re. 1 being premium)		15,00,000	10,00,000 5,00,000
Bank A/c Dr. To Share Allotment A/c (Being receipt of Share Allotment Money on 5,00,000 shares at Rs. 3 per share, *less* amount of Application Money of Rs. 2,00,000 adjusted towards Allotment)		13,00,000	13,00,000
Share First Call A/c Dr. To Share Capital A/c To Share Premium A/c (Being the entry for amount due on First Call on 5,00,000 shares at Rs. 4 per share, Re. 1 being premium)		20,00,000	15,00,000 5,00,000
Bank A/c Dr. To Share First Call A/c (Being receipt of First Call Money @ Rs. 4 per share on 4,99,800 shares)		19,99,200	19,99,200
Share Capital A/c Dr. Share Premium A/c Dr. To Shares Forfeited A/c To Share First Call A/c (Being the entry on forfeiture of 200 shares of A, Rs. 7 called up on Capital A/c for non-payment of First Call of Rs. 4, including premium of Re.1)		1,400 200	*800 800
Bank A/c Dr. To Share Capital A/c (Being receipt of amount on re-issue of 200 shares of A which had been forfeited, to C at Rs. 7 per share)		1,400	1,400

*The amount credited to Shares Forfeited Account is Rs. 800 and not Rs. 1,000. Although amount received on these shares is Rs. 1,000, Rs. 200 is on account of Share Premium.

			Rs.	Rs.
	Shares Forfeited A/c Dr. To Capital Reserve A/c (Being the entry for transfer of profit on re-issue of 200 forfeited Shares to C, *i.e.*, transfer of Shares Forfeited A/c to Capital Reserve A/c)		800	800
	Share Second and Final Call A/c Dr. To Share Capital A/c To Share Premium A/c (Being the entry for amount due on 5,00,000 shares at Rs. 4 per share, Re. 1 being premium)		20,00,000	15,00,000 5,00,000
	Bank A/c Dr. To Share Second and Final Call A/c (Being receipt of Second and Final Call of Rs. 4 per share, Re. 1 being premium, on 4,99,700 shares)		19,98,800	19,98,800
	Share Capital A/c Dr. Share Premium A/c Dr. To Shares Forfeited A/c To Share Second and Final Call A/c (Being the entry on forfeiture of 300 shares of C for non-payment of Second and Final Call of Rs. 4 per share, Re. 1 being premium)		3,000 300	2,100 1,200
	Bank A/c Dr. To Share Capital A/c Being the entry for receipt of amount on re-issue of 300 shares of A, which had been forfeited, to D at Rs. 10 per share)		3,000	3,000
	Shares Forfeited A/c Dr. To Capital Reserve A/c (Being the entry for transfer of profit on re-issue of 300 shares of B which had been forfeited, to D, *i.e.*, transfer of Shares Forfeited A/c to Capital Reserve A/c)		2,100	2,100

(*b*) **Re-issue at a premium** (*i.e., at more than called up value*). If forfeited shares originally issued at a premium are re-issued at a premium, the following Journal Entry is passed :

Bank A/c	Dr.	(with amount received)
To Share Capital A/c		(with called up amount)
To Share Premium A/c		(with share premium)
(Being the entry for receipt of money on re-issue of......forfeited shares, Rs......per share called up, now re-issued at Rs......per share)		

Profit on re-issue of forfeited shares (*i.e.*, balance of Shares Forfeited Account) will be transferred to Capital Reserve Account.

Illustration 27. A Ltd. has an authorised capital of Rs. 2,00,000 divided into shares of Rs. 10 each, the whole of which is issued and subscribed at a premium of Rs. 2 per share.

The amount was payable as follows :

On application and allotment Rs. 5 per share ;

On first call Rs. 4 per share (including premium) ;

The balance as and when required.

The company made both the calls.

The application and allotment money was duly received. But a shareholder holding 1,000 shares failed to pay both the calls and his shares were forfeited. They were later re-issued for Rs. 16 per share fully paid.

Give journal entries regarding the forfeiture and re-issue.

Solution :

JOURNAL

				Rs.	Rs.
	Share Capital A/c	Dr.		10,000	
	Share Premium A/c	Dr.		2,000	
	To Shares Forfeited A/c				5,000
	To Share First Call A/c				4,000
	To Share Second and Final Call A/c				3,000
	(Being the entry on forfeiture of 1,000 shares of Rs. 10 each, fully called up, for non-payment of first and second and final calls of Rs. 4 and Rs. 3 respectively, as per resolution of the Board dated......)				
	Bank A/c	Dr.		16,000	
	To Share Capital A/c				10,000
	To Share Premium A/c				6,000
	(Being the entry for re-issue of 1,000 forfeited shares as fully paid up @ Rs. 16 per share, Rs. 6 per share being premium)				
	Shares Forfeited A/c	Dr.		5,000	
	To Capital Reserve A/c				5,000
	Being the entry for transfer of profit on re-issue of 1,000 forfeited shares to Capital Reserve A/c)				

(*c*) **Re-issue at a discount** (*i.e., at less than called up value).* If forfeited shares originally issued at a premium are re-issued at a discount, the maximum discount that can be allowed at the time of re-issue must not exceed the amount credited to Shares Forfeited Account at the time of forfeiture. A further discount upto a maximum of ten per cent may be allowed if formalities under Sec. 79 (which deals with issue of shares at a discount) of the Companies Act, 1956 have been complied with.

The Journal Entries in the above case are as follows :

If discount allowed on re-issue is upto a maximum of the amount credited to Shares Forfeited Account, the Journal entry on re-issue at a discount of shares originally issued at a premium would be as follows :

Bank A/c	Dr.	(with amount received)
Shares Forfeited A/c	Dr.	(with discount on re-issue)
To Share Capital A/c		(with called up amount)
(Being the entry for receipt of amount on re-issue of...... forfeited shares at a discount of Rs.......per share)		

Any profit on re-issue (*i.e.*, balance of Shares Forfeited Account) will be closed by transfer to Capital Reserve Account.

If discount allowed on re-issue is upto a maximum of ten per cent beyond the Shares Forfeited amount, the Journal Entry on re-issue at a discount of shares originally issued at premium would be as follows :

Bank A/c	Dr.	(with amount received)
Shares Forfeited A/c	Dr.	(with discount on re-issue)
Discount on Issue of Shares A/c	Dr.	(with discount upto 10%)
To Share Capital A/c		(with called up amount)
(Being the entry for receipt of amount on re-issue of......forfeited shares, Rs.......called up at a discount of Rs.......per share)		

In this case there will be no balance left in the Shares Forfeited Account.

Illustration 28. Fortune Ltd., which had issued 5,00,000 shares of Rs. 10 each to public for subscription payable as Rs. 5 on application and Rs. 7 (including premium of Rs. 2) on allotment forfeited 200 shares of Rash Bihari, 300 shares of V.K. Raman, and 400 shares of Sultan Ahmed for non-payment of allotment money.

The Company sold these shares fully paid as follows to :

(1) Rash Bihari at Rs. 6 per share.

(2) V.K. Raman at Rs. 5 per share.

The Company wanted to sell the shares of Sultan Ahmed at Rs. 3 per share but was prevented to do so by its Secretary ? What reason do you think the Secretary might have given ?

Pass Journal Entries relating to forfeiture and re-issue.

Solution :

JOURNAL

			Rs.	Rs.
Share Capital A/c Dr.			9,000	
Share Premium A/c Dr.			1,800	
To Shares Forfeited A/c				4,500
To Share Allotment A/c				6,300
(Being entry on forfeiture of 200 shares of Rash Bihari, 300 shares of V.K. Raman, and 400 shares of Sultan Ahmed, for non-payment of Allotment Money, as per resolution of the Board dated......)				
Bank A/c Dr.			1,200	
Shares Forfeited A/c Dr.			800	
To Share Capital A/c				2,000
(Being receipt of money on re-issue of 200 forfeited shares of Rash Bihari at Rs. 6 per share)				
Bank A/c Dr.			1,500	
Shares Forfeited A/c Dr.			1,500	
To Share Capital A/c				3,000
(Being receipt of money on re-issue of 300 forfeited shares of V.K. Raman at Rs. 5 per share)				
Shares Forfeited A/c Dr.			200	
To Capital Reserve A/c				200
(Being the entry for transfer of profit on re-issue of 200 shares of Rash Bihari)				

The Secretary might have advised the Company that it would be violating the provisions of Sec. 79 of the Companies Act, 1956 which was referred to earlier in this Chapter.

(3) Re-issue of forfeited shares originally issued at a discount

(*a*) **Re-issue at par** (*i.e., at called up value*). The Journal Entries in this case are as follows :

Bank A/c	Dr.	(with amount received)
To Share Capital A/c		(with called up amount)
(Being the entry for receipt of money on re-issue of......forfeited shares, Rs......called up, at Rs.......per share)		

Shares Forfeited A/c	Dr.	
To Capital Reserve A/c		
(Being the entry for transfer of profit on......forfeited shares to Capital Reserve A/c)		

(*b*) **Re-issue at a premium** (*i.e., at more than called up value*). The following Journal Entries are passed in this case :

Bank A/c	Dr.	(with amount received)
To Share Capital A/c		(with called up amount)
To Share Premium A/c		(with share premium amount)
(Being receipt of amount on re-issue of...... forfeited shares, Rs.......called up, at Rs......per share, Rs.......being premium)		

Shares Forfeited A/c	Dr.	
To Capital Reserve A/c		
(Being the entry for transfer of profit on re-issue of......forfeited shares to Capital Reserve A/c)		

(*c*) **Re-issue at a discount** (*i.e., at less than called up value*). In this case a company can allow discount up to a maximum of amount received on forfeited shares plus amount originally allowed as discount at the time of issue of shares. If this maximum discount is allowed, the Journal Entry would be as follows :

Bank A/c	Dr.	(with amount received)
Shares Forfeited A/c	Dr.	(with discount allowed)
Discount on Issue of Shares A/c	Dr.	(with additional discount allowed)
To Share Capital A/c		(with called up amount)
(Being the entry for receipt of amount on re-issue of ......forfeited shares, Rs......per share called up, at Rs......per share)		

Illustration 29. On 1st April, 1989 Asha Ltd. forfeited 300 shares of Rs. 10 each allotted to R. Nathan for non-payment of Final Call of Rs. 4 per share. The Company had issued these shares at a discount of Re. 1 per share.

Give the Journal Entries when the forfeited shares are re-issued as follows :

(1) 100 shares to Pankhuri at Rs. 10 per share on 1st May, 1989.

(2) 100 shares to Smriti at Rs. 12 per share on 1st June, 1989.

(3) 100 shares to Ayushi at Rs. 4 per share on 31st December, 1989.

JOURNAL

1989			Rs.	Rs.
Apr. 1	Share Capital A/c Dr.		3,000	
	To Shares Forfeited A/c			1,500
	To Share Final Call A/c			1,200
	To Discount on Issue of Shares A/c			300
	(Being the entry on forfeiture of 300 shares issued at a discount of Re. 1 per share, fully called up for non-payment of Final Call of Rs. 4 per share as per resolution of the Board dated......)			
May 1	Bank A/c Dr.		1,000	
	To Share Capital A/c			1,000
	(Being the entry for receipt of amount on re-issue of 100 forfeited shares at Rs. 10 per share)			
May 1	Shares Forfeited A/c Dr.		500	
	To Capital Reserve A/c			500
	(Being the entry for transfer of profit on re-issue of 100 forfeited shares to Capital Reserve A/c)			
June 1	Bank A/c Dr.		1,200	
	To Share Capital A/c			1,000
	To Share Premium A/c			200
	(Being the entry for receipt of amount on re-issue of 100 forfeited shares at Rs. 12 per share)			
June 1	Shares Forfeited A/c Dr.		500	
	To Capital Reserve A/c			500
	(Being the entry on transfer of profit on re-issue of 100 forfeited shares to Capital Reserve A/c)			
Dec. 31	Bank A/c Dr.		400	
	Shares Forfeited A/c Dr.		500	
	Discount on Issue of Shares A/c Dr.		100	
	To Share Capital A/c			1,000
	(Being the entry for receipt of amount on re-issue of 100 forfeited shares at Rs. 4 per share)			

ISSUE OF SHARES FOR CONSIDERATION OTHER THAN CASH

A company may issue shares for cash or for some consideration other than cash. For example, a company may take over the assets of an existing business or may enter into a collaboration agreement with a firm of technicians for technical know-how or may purchase some patent. In these cases, the company may, instead of paying cash, allot fully paid-up shares as consideration for the price of services or assets acquired.

In such a case, the Journal Entry would be as follows :

Assets A/c Dr.

To Share Capital A/c

(Being the entry for issue of......shares, fully paid-up, against acquisition of......)

It should however be noted that the particulars of shares issued for consideration other than cash are to be shown separately under the subscribed capital on the liabilities side of the Balance Sheet. The liabilities side of the Balance Sheet, as regards this item, appears as follows :

BALANCE SHEET

Liabilities		Rs.
SHARE CAPITAL :		
Authorised Capital		
Issued Capital		
Subscribed Capital		
50,000 Equity Shares of Rs. 10 each Rs. 7 per share Rs. called up	Rs. 3,50,000	
Of the above shares,....... shares are allotted as fully paid-up, pursuant to a contract without payments being received in cash		

Illustration 30. Fortune Limited entered into an agreement with Knowhow Limited for the acquisition of a patent for the manufacture of solar ovens for Rs. 5,00,000. The consideration was to be settled by issue of 20,000 shares of Rs. 10 each, fully paid up at a premium of Rs. 2 per share and balance in cash over a period of three years in two equal instalments with interest at 15% per annum on the outstanding balances. The Company also acquired the following assets of Oven Bros., at prices shown against the assets :

Plant and Machinery	Rs. 3,75,000
Testing Equipment	Rs. 1,25,000
Patents	Rs. 2,00,000

Oven Bros. had a long-term liability of Rs. 3,00,000 to be discharged over a period of ten years. Fortune Limited agreed to take over this liability also. In view of taking over of this liability the net consideration payable by Fortune Limited was agreed at Rs. 3,50,000 which was settled by payment of Rs. 1,00,000 in cash and the balance by issue of Rs. 10, fully paid-up shares, at par.

Journalise these transactions in the books of Fortune Limited at the time of the acquisition of assets and liabilities.

Solution :

JOURNAL

		Rs.	Rs.
Patents A/c Dr.		5,00,000	
To Knowhow Ltd.			5,00,000
(Being the entry for acquisition of patent for the manufacture of solar ovens)			
Knowhow Ltd. Dr.		5,00,000	
To Share Capital A/c			2,00,000
To Share Premium A/c			40,000
To Loan A/c			2,60,000
(Being the entry for discharge of amount owing to Knowhow Ltd. by allotment of 2,00,000 shares of Rs. 10 each, fully paid-up, at a premium of Rs. 2 per share and balance in instalments)			
Plant and Machinery A/c Dr.		3,75,000	
Testing Equipment A/c Dr.		1,25,000	
Patents A/c Dr.		2,00,000	
To Liability A/c			3,00,000
To Oven Bros.			3,50,000
To Capital Reserve			*50,000
(Being the entry for acquisition of assets of Rs. 7,00,000 and liability of Rs. 3,00,000 of Oven Bros., for a consideration of Rs. 3,50,000, the difference being treated as Capital Reserve)			
Oven Bros. Dr.		3,50,000	
To Share Capital A/c			2,50,000
To Bank A/c			1,00,000
(Being the entry for discharge of purchase consideration—by issue of 25,000 shares of Rs. 10, each, fully paid up, at par, and Rs. 1,00,000 in cash)			

*If the amount agreed to be paid by the purchasing company is *less* than the net purchase consideration, the difference is a gain for the company. This gain is treated as *capital reserve* since it is not made in the ordinary course of business. If the amount agreed to be paid by the purchasing company is *more* than the net purchase consideration, the excess payment is on account of *goodwill.*

REDEEMABLE PREFERENCE SHARES

A company can issue redeemable preference shares subject to fulfilment of certain conditions as laid down in Sec. 80 of the Companies Act 1956.

These conditions relate mostly to redemption of these shares and have to be scrupulously followed.

The various conditions relating to issue and redemption of redeemable preference shares as laid down in Sec. 80 are as follows :

(1) The Articles should permit the issue of such shares.

(2) These shares can be redeemed only if they are fully paid up.

(3) These shares can be redeemed only out of profits of the company which would otherwise be available for dividend, or out of the proceeds of a fresh issue of shares (and note, *not* debentures) made for the purpose of the redemption. It should be noted that profits which are not available for distribution as dividend cannot be utilised for the redemption of these shares.

(4) The premium, if any, payable on redemption must have been provided for out of the profits of the company or out of the company's Share Premium Account, before the shares are redeemed.

(5) Where redemption is made out of profits, a sum equivalent to the nominal value of the shares redeemed must be transferred to a reserve fund, called the *Capital Redemption Reserve Account*. This reserve is treated as equivalent to share capital of the company and can be reduced only if the provisions relating to reduction of share capital are observed.

(6) The Capital Redemption Reserve Account may be applied by the company in paying up unissued shares of the company to be issued to the members of the company as fully paid bonus shares.

(7) Redemption of preference shares by a company is not taken as reducing the amount of its authorised Share Capital.

(8) The Companies (Amendment) Act, 1988 now requires that a company limited by shares cannot issue any preference share which is irredeemable or which is redeemable after the expiry of a period of ten years from the date of its issue. This means the maximum period of redeemable preference shares can now be ten years.

In an examination question, if preference shares are to be redeemed without issue of fresh shares it may be assumed that there are sufficient profits out of which redemption may be carried out. In such a case, the students should not forget to transfer an amount equivalent to the nominal value of the shares redeemed to Capital Redemption Reserve Account.

The Journal Entries for redemption of redeemable preference shares are as follows :

Where redemption is out of profits

(*a*) Redeemable Preference Share Capital A/c Dr.
Premium on Redemption of Redeemable Preference Shares A/c (if any) Dr.
To Redeemable Preference Shareholders A/c
(Being entry for transfer of amount due on redemption of Redeemable Preference Shares to Shareholders Account)

(*b*) Redeemable Preference Shareholders A/c Dr.
To Bank A/c
(Being entry for amount paid on redemption of shares)

(*c*) Profit and Loss Appropriation/Reserve/Share Premium A/c Dr.
To Premium on Redemption of Preference Shares A/c
(Being entry to write off Premium on Redemption of Redeemable Preference Shares to Profit and Loss Appropriation/Reserve/Share Premium A/c, as the case may be)

(*d*) Profit and Loss Appropriation/Reserve A/c Dr.
To Capital Redemption Reserve A/c
(Being entry to transfer a sum equal to the nominal value of the shares redeemed out of profits/reserves)

Where redemption is out of proceeds of a fresh issue of shares

In this case first of all entries for a fresh issue of shares are made. These entries have already been explained. Then the entries given above excepting entry (*d*) are passed.

Illustration 31. Rama Ltd. has 2,000 11% Redeemable Preference Shares of Rs. 100 each fully paid and 1,000 12% Redeemable Preference Shares of Rs. 100 each, Rs. 80 paid up, as on 1st April, 1989. The Company decides to redeem these shares on this date by making the following issues :

(1) 20,000 Equity Shares of Rs. 10 each at par.
(2) 1,000 14% Debentures of Rs. 100 each at par.
The new issue is fully subscribed and paid.
Pass the Journal Entries, including cash transactions.

Solution :

JOURNAL

1989			Rs.	Rs.
Apr. 1	Bank A/c Dr. To Equity Share Capital A/c (Being amount received on issue and allotment of 20,000 Equity Shares of Rs. 10 each for the purpose of redemption of Redeemable Preference Shares)		2,00,000	2,00,000
	Bank A/c Dr. To 14% Debentures A/c (Being amount received on issue of 1,000 14% Debentures of Rs. 100 each)		1,00,000	1,00,000

1989			Rs.	Rs.
April 1	11% Redeemable Preference Share Capital A/c Dr.		2,00,000	
	To 11% Redeemable Preference Shareholders A/c			2,00,000
	(Being the entry for transfer of amount due on redemption to Shareholders A/c)			
	11% Redeemable Preference Shareholders A/c Dr.		2,00,000	
	To Bank A/c			2,00,000
	(Being entry for amount paid on redemption)			

Notes :(*a*) 12% Redeemable Preference Shares cannot be redeemed as they are not fully paid.

(*b*) Amount received on issue of Debentures cannot be utilized for redeeming Preference Shares.

(*c*) It is assumed that the full amount was received on application for equity shares and debentures.

Illustration 32. Rs. 50,000 12% Redeemable Preference Shares of Rs. 100 each were outstanding in Radiation Ltd. as on July 1, 1989. The Company made an issue of 5,000 Equity Shares of Rs. 10 each at par for the purpose of redeeming these shares. A premium of 10% was payable on redemption. The issue was fully subscribed and the amount was duly received.

Pass the Journal Entries, including cash transactions.

Solution :

JOURNAL

1989			Rs.	Rs.
July 1	Bank A/c Dr.		50,000	
	To Equity Share Capital A/c			50,000
	(Being issue of 5,000 Equity Shares of Rs. 10 each at par for the purpose of redeeming preference shares.)			
	12% Redeemable Preference Share Capital A/c Dr.		50,000	
	Premium on Redemption of 12% Redeemable Preference Shares A/c Dr.		5,000	
	To 12% Redeemable Preference Shareholders A/c			55,000
	(Being entry for transfer of amount due on redemption of Redeemable Preference Shares to Shareholders A/c)			

			Rs.	Rs.
1989 May 1	12% Redeemable Preference Shareholders A/c Dr.		55,000	
	To Bank A/c			55,000
	(Being amount paid on redemption of shares)			
	Profit and Loss Appropriation A/c Dr.		5,000	
	To Premium on Redemption of 12% Redeemable Preference Shares A/c			5,000
	(Being entry to write off Premium on Redemption to Profit and Loss Appropriation A/c)			

Illustration 33. On November 1, 1989, Mahesh Ltd. made an issue of 20,000 Equity Shares of Rs. 10 each at a premium of Re. 1 per share for the purpose of redeeming 2,000 12% Redeemable Preference Shares of Rs. 100 each. A premium of Rs. 5 per share was payable on redemption.

Show Ledger Accounts, assuming that provision for Premium Payable on Redemption is made out of Premium on Issue of Shares.

Solution :

LEDGER

Dr. 12% REDEEMABLE PREFERENCE SHARE CAPITAL ACCOUNT Cr.

1989		Rs.	1989		Rs.
Nov.1	To Redeemable Preference Shareholders A/c (transfer)	2,00,000	Nov. 1	By Balance b/d	2,00,000
		2,00,000			2,00,000

Dr. REDEEMABLE PREFERENCE SHARE HOLDERS' ACCOUNT Cr.

1989		Rs.	1989		Rs.
Nov.1	To Bank	2,10,000	Nov. 1	By 12% Redeemable Preference Share Capital A/c	2,00,000
				By Premium on Redemption A/c	10,000
		2,10,000			2,10,000

Dr. **EQUITY SHARE CAPITAL ACCOUNT** Cr.

		Rs.			Rs.
			1989 Nov. 1	By Bank	2,00,000
					2,00,000

Dr. **SHARE PREMIUM ACCOUNT** Cr.

		Rs.			Rs.
1989 Nov.1	To Premium on Redemption A/c	10,000	1989 Nov. 1	By Bank	20,000
	To Balance c/d	10,000			
		20,000			20,000
				By Balance b/d	10,000

Dr. **PREMIUM ON REDEMPTION ACCOUNT** Cr.

		Rs.			Rs.
1989 Nov.1	To Redeemable Preference Shareholders A/c	10,000	1989 Nov. 1	By Share Premium A/c (transfer)	10,000

Illustration 34. The financial position of Victor Ltd. on 1st April, 1989 was as follows :

BALANCE SHEET OF VICTOR LTD. as on 1st April, 1989

Liabilities	Rs.	*Assets*	Rs.
Share Capital :		Sundry Assets	4,00,000
10,000 12% Redeemable Preference Shares of Rs. 10 each fully paid	1,00,000	Cash at Bank	2,00,000
5,000 14% Redeemable Preference Shares of Rs. 10 each, Rs. 8 per share paid	40,000		
20,000 Equity Shares of Rs. 10 each fully paid	2,00,000		
General Reserve	1,50,000		
Profit and Loss A/c	60,000		
Creditors	50,000		
	6,00,000		6,00,000

The Company decided to redeem out of profit, at a premium of 5 per cent, all the redeemable Preference Shares which could be redeemed, and to draw upon the General Reserve to the extent of Rs. 50,000 for that purpose.

Give the journal entries and the amended Balance Sheet of the Company after the redemption is carried out.

Solution :

JOURNAL

			Rs.	Rs.
1989 Apr. 1	12% Redeemable Preference Share Capital A/c Dr.		1,00,000	
	Premium on Redemption of 12% Redeemable Preference Shares A/c Dr.		5,000	
	To 12% Redeemable Preference Shareholders A/c			1,05,000
	(Being entry for transfer of amount due on redemption of 12% Redeemable Preference Shares to Shareholders Account)			
	12% Redeemable Preference Shareholders A/c Dr.		1,05,000	
	To Bank A/c			1,05,000
	(Being entry for payment on redemption of 12% Redeemable Preference Shares at a premium of 5%)			
	General Reserve A/c Dr.		50,000	
	Profit and Loss A/c Dr.		55,000	
	To Profit and Loss Appropriation A/c			1,05,000
	(Being entry for transfer from General Reserve and Profit and Loss A/c for the purpose of redeeming 12% Preference Shares out of Profits available for dividend)			
	Profit and Loss Appropriation A/c Dr.		5,000	
	To Premium on Redemption of 12% Redeemable Preference Shares A/c			5,000
	(Being the entry for making provision for Premium on Redemption of Redeemable Preference Shares out of profits available for dividend)			
	Profit and Loss Appropriation A/c Dr.		1,00,000	
	To Capital Redemption Reserve A/c			1,00,000
	(Being entry to transfer a sum equal to the nominal value of the 12% Preference Shares redeemed out of profits)			

BALANCE SHEET of VICTOR LTD., as on 1st April, 1989

Liabilities	Rs.	*Assets*	Rs.
Share Capital :		Sundry Assets	4,00,000
5,000 14% Redeemable Preference Shares of Rs. 10 each, Rs. 8 per share paid	40,000	Cash at Bank	95,000
20,000 Equity Shares of Rs. 10 each fully paid	2,00,000		
Capital Redemption Reserve Account	1,00,000		
General Reserve	1,00,000		
Profit and Loss Account	5,000		
Creditors	50,000		
	4,95,000		4,95,000

Redemption of irredeemable preference shares

The Companies (Amendment) Act, 1988 requires that irredeemable preference shares issued by a company before 15th June,1988 shall be redeemed by the company within a period not exceeding five years from 15th June,1988.

TEST QUESTIONS

1. Define a company. What are the characteristics of a limited company ?

2. How is a limited company formed ? Distinguish between a public company and a private company.

3. What is a Memorandum of Association ? What are its clauses ?

4. Define Articles of Association. What is the difference between Memorandum and Articles ?

5. What is a Prospectus ? Why is it issued ?

6. Name and explain the various classes of shares which a public company may issue.

7. Explain the different types of share capital with examples.

8. What is Authorised Capital ? What is its significance ? How does it differ from Issued Capital ? *(All India SSCE, 1986)*

9. (*a*) How is share capital account shown in the balance-sheet of a company ? *(Delhi SSCE, 1985)*

(*b*) What is Reserve Capital ? Does it differ from Capital Reserve ? *(All India SSCE, 1986)*

10. Distinguish between

(*a*) Memorandum and Articles of Association

(*b*) Over-subscription' and 'Under-subscription' of shares issued by a company. *(All India SSCE, 1989)*

(*c*) an equity share and a preference share. *(Delhi SSCE, 1982,88)*

11. What do you mean by 'Pro-rata' allotment of shares ? State the purposes for which share premium money can be used. *(Delhi SSCE, 1983)*

12. Can shares be issued at a discount ? Describe the formalities to be complied with before shares can be issued at a discount ?

13. What are the conditions which must be fulfilled for the issue of shares at a discount by a company ? *(Delhi SSCE, 1987)*

14. Can a company issue shares at discount ? What conditions must a company comply with before the issue of such shares ?

(All India SSCE, 1989)

15. State the conditions which must be fulfilled by a company for the issue of shares at a discount. *(Delhi SSCE, 1986)*

16. Give the meaning of issuing 'shares at premium' by a Joint Stock Company. For what purposes can premium amount be utilised ?

(All India SSCE, 1985)

17. What do you understand by the term 'Forfeiture of Shares' ? Can forfeited shares be reissued at a discount ? If so, to what extent ? Where would you transfer the balance left in the shares forfeited account after the reissue of such shares ? *(Delhi SSCE, 1989)*

18. Narrate the procedure for forfeiture of shares by a joint stock company and also state the rules regarding the re-issue of such shares.

(All India SSCE, 1983)

19. What are Forfeited Shares ? Can they be re-issued ? To what extent can they be re-issued at a discount ?

20. State the purposes for which share premium can be utilised.

(Delhi SSCE, 1985)

21. Explain the following :

(*i*) Calls in arrears. *(Delhi SSCE, 1981, 1980)*
(*ii*) Pro-rata Allotment of shares. *(Delhi SSCE, 1981)*
(*iii*) Over-subscription. *(Delhi SSCE, 1982)*
(*iv*) Issue of Shares at a Discount. *(Delhi SSCE, 1982)*

22. How will you deal with the following ? (*a*) Premium on issue of shares, (*b*) Balance of the forfeited shares account.

23. State the accounting procedure relating to the redemption of redeemable preference shares. *(Delhi SSCE, 1980)*

24. Write short notes on :

(*a*) Calls received in a advance *(Delhi SSCE, 1980)*
(*b*) Contingent liability.
(*c*) Authorised Capital.
(*d*) Equity Shares.
(*e*) Preference Shares.
(*f*) Forfeited Shares.
(*g*) Minimum Subscription.
(*h*) Share Premium Account. *(Delhi SSCE, 1981)*
(*i*) Capital Reserve Account. *(Delhi SSCE, 1981)*
(*j*) Redeemable Preference Shares.
(*k*) Participating Preference Shares.

PRACTICAL EXERCISES—I

1. A company issues 10,000 shares of the value of Rs. 10 each, payable Rs. 3 on Application, Rs. 3 on Allotment and Rs. 4 on the First and Final call. All the shares are subscribed and duly allotted and the Call is made. All cash is duly received.

Give the Journal Entries for the above transactions and prepare Cash Book.

(Cash Book Total Rs. 1,00,000).

2. A limited liabilities company issued 10,000 Equity Shares of Rs. 10 each, payable Rs. 2 on Application, Rs. 3 on Allotment and Rs. 5 on First and Final Call. All moneys on Equity Shares were duly received except on 50 Equity Shares on which only Application Money was paid.

Pass the necessary Journal entries in the books of the Company and show capital as it would appear in Balance Sheet.

(Capital Rs. 9,99,600).

3. Alfa Co. Ltd. issued 5,000 preference shares of Rs. 10 each at a premium of Rs. 4 per share, payable Re. 1 per share on Application, Rs. 6 per share on Allotment (including premium), Rs. 3 on First Call and Rs. 4 on Final Call. The shares were all subscribed and money was duly received except the First and Final Call money on 100 shares and the Final Call money on 150 shares.

Give the Journal and Cash Book entries to record the above transactions.

(Cash Book Total Rs. 68,700).

4. A company issued Rs. 5,00,000 new capital divided into Rs. 10 shares at a premium of Rs. 4 per share, payable thus :

On Application Re. 1 per share.

On Allotment Rs. 4 per share and Rs. 2 premium.

On Final Payment Rs. 5 per share and Rs. 2 premium.

Over-payment on application was to be applied towards sums due on allotment. Where no allotment was made, money was to be returned in full. The issue was over-subscribed to the extent of 13,000 shares. Applicants for 12,000 shares were allotted only 1,000 shares and applicants for 2,000 shares were sent letters of regret. All money due on allotment and final call was duly received.

Make the necessary entries in company's books.

(Application Money : returnted Rs. 7,000, adjusted towards allotment Rs. 6,000).

5. The Eastern Star Cycle Ltd. was registered with a capital of Rs. 5,00,000 divided into 20,000 shares of Rs. 25 each. The Company offered to the public for subscription 10,000 shares payable Rs. 5 per share on application, Rs. 5 per share on allotment and the balance in two calls of Rs. 7·50 each. The company received applications for 11,600 shares. Applications for 1,000 shares were rejected altogether and application money was returned to the applicants. A person who applied for 1,000 shares was allotted only 400 shares and the excess of his application money was carried forward towards the payment of allotment and calls.

Give Journal entries to record the above issue of shares and show how it will be shown in the Balance Sheet.

(Application Money : returned Rs. 5,000, adjusted towards allotment Rs. 3,000).

6. A limited company with an authorised capital of Rs. 20,00,000 in shares of Rs. 10 each issued 1,00,000 of such shares payable Rs. 2·50 per

share on application, Rs. 2·50 on allotment, Rs. 2 three months later, and the balance as and when required.

All moneys payable on application and allotment were duly received ; but when the call of Rs. 2 per share was made, one shareholder holding 500 shares failed to pay the amount due, and another shareholder holding 1,000 shares paid them in full.

Record these transactions in the ledger of the company, and also show how the Capital will appear in the company's Balance Sheet.

(Balance Sheet Total Rs. 7,02,000).

7. A Company was registered with a nominal capital of Rs. 1,00,000 divided into 10,000 shares of Rs. 10 each. It offered to the public for subscription 5,000 shares at a premium of Re. 1 per share, payable Rs. 2·50 per share on Application, Rs. 3·50 (including premium) per share on Allotment and Rs. 5 per share on the First and Final Call.

All the shares were taken up and duly paid for. One shareholder holding 100 shares paid the full amount at the time of Allotment. Another shareholder holding 200 shares failed to pay the Call.

Show the necessary Journal and Cash Book Entries in the books of the Company.

(Cash Book Total Rs. 54,500).

8. On February 1, 1989, the directors of the Mahalakhsmi Ltd. issued 5,00,000 equity shares of Rs. 10 each at Rs. 12 per share, payable as to Rs. 5 on application (including premium), Rs. 4 on allotment and the balance on May, 15, 1989.

On February 10, 1989, applications were received for 7,00,000 shares. Of the cash received in excess, Rs. 4,00,000 was returned and Rs. 6,00,000 was applied to the amount due on allotment. The balance of allotment money was paid on February 28, 1989. All the shareholders paid the call due on May 15, 1989 with the exception of one holding 500 shares. Theses shares were forfeited on July 31, 1989.

Journalise the transactions and show Leger Accounts.

(Cash Book Total Rs. 59,98,500 ; Share Capital Balance Rs. 49,95,000).

9. Martin Co. Ltd. issued its prospectus on 1st January, 1989 inviting applications for 2,00,000 shares of Rs. 25 each, payable Rs. 5 per share on application, Rs. 5 per share on allotment on the 15th February and Rs. 15 per share on the 1st April.

The whole of the above issue was applied for and the cash duly received, with the exception, that on the 30th April the directors resolved that the 100 shares upon which the application and allotment money had been paid should be forfeited for non-payment of the call of Rs. 15 per share on the 1st April.

Give the Journal Entries for the above transactions and prepare Ledger Accounts.

[Cash Book Total Rs. 49,98,500 ; Share Capital Balance Rs. 49,97,500; Shares Forfeited Account (Cr.) Rs. 1,000].

10. A limited company offered 10,000 equity shares of Rs. 20 each for public subscription at a premium of 10%. The full amount is payable on

application. Applications were received for 20,000 shares and it was decided to make *pro rata* allotment to all the applicants.

Journalise the transactions. *(Delhi SSCE, 1985)*

(Application Money returned Rs. 2,20,000).

11. Premier Scooters Ltd. invited applications for 10,00,000 Equity Shares of Rs. 10 each, payable as under :

On Application	Rs. 2
On Allotment	Rs. 3

and the Balance when required.

12,00,000 shares were applied for. The directors made a *pro rata* allotment for 10,00,000 shares. Rs. 20,00,000 was received as allotment money.

Pass necessary journal entries to record the above issue of shares. Transfer Allotument Money not received to Calls in Arrear Account.

(Adapted from Delhi SSCE, 1982)

(Calls in Arrear Rs. 6,00,000).

12. A limited company was registered with a capital of Rs. 5,00,000 in shares of Rs. 10 each. It issued 20,000 such shares at a premium of Rs. 2 per share, payable Rs. 2 per share on application, Rs. 5 per share on allotment (including premium) and Rs. 2 per share on first call made 3 months later. All the moneys payable on application and allotment were duly received but when the first call was made, one shareholder paid the entire balance on his holding of 300 shares and another shareholder holding 1,000 shares failed to pay the first call money.

Give Journal Entires to record the above transactions, prepare Cash Book and show how the above transactions will appear in the Company's Balance Sheet.

(Cash Book Total Rs. 1,78,900 ; Share Capital Rs. 1,40,000).

13. A Co. Ltd. was registered with a nominal capital of Rs. 1,00,00,000 in equity shares of Rs. 10 each. It offered to the public 6,00,000 shares for subscription. The applications were, however, received for 8,00,000 shares. The directors had to reject the applications for 1,00,000 shares and to return the money received thereon. The application money received on the other 1,00,000 shares was adjusted towards allotment account. The amount payable on shares was Rs. 2 per share on application, Rs. 4 per share on allotment and the balance on first call. One shareholder holding 1,000 shares failed to pay the first call money.

Pass the necessary Journal and Cash Book entries in the books of the company to record the above transactions and show Share Capital in the Balance Sheet.

(Cash Book Total Rs. 59,96,000. Share Capital Rs. 60,00,000 *less* calls in arrear Rs. 4,000).

14. Fair Practices Ltd. invited applications for 10,00,000 equity shares of Rs. 100 each at a discount of Rs. 4 per share. The amount was payable as follows :

On application Rs. 20 ; on allotment Rs. 30 ; and on first and final call Rs. 46.

The public applied for 9,00,000 shares and these were allotted. All moneys due were collected with the exception of the first and final call on 400 shares which were forfeited. 200 of these shares were re-issued as fully paid up for a payment of Rs. 80 per share.

Journalise the above transactions in the books of the company and prepare its Balance Sheet.

[Bank Balance Rs. 8,63,97,000 ; discount on Issue of Shares Rs. 35,99,200 ; Share Capital Rs, 9,09,80,000 (including Shares Forfeited Account Rs. 10,000) ; Capital Reserve Rs. 6,800].

15. Nav Laskshmi Ltd. issued a prospectus inviting applications for 50,000 shares of Rs. 10 each. These shares were issued at par on the following terms :

On application Rs. 3, on allotment Rs. 4, on first call Rs. 2 and on final call the balance.

Applications were received for 60,000 shares. Allotments were made on the following basis :

(*i*) To applicants for 10,000 shares—in full ;

(*ii*) To applicants for 20,000 shares—15,000 shares ;

(*iii*) To applicants for 30,000 shares—25,000 shares.

All excess amount paid on application is to be adjusted against amount due on allotment.

The shares were fully called and paid up except amounts of allotment, first and second and final calls not paid by those who applied for 2,000 shares out of the group applying for 20,000 shares.

All the shares on which allotument and call moneys were not paid were forfeited by the Board of Directors. 1,000 forfeited shares were re-issued as fully paid on receipt of Rs. 8 per share.

Show the Journal Entries in the books of Nav Lakshmi Ltd., and its Balance Sheet *(Adapted from All India SSCE, 1985)*

[Bank Balance Rs. 4,99,000. Share Capital 4,97,000 (including Shares Forfeited Rs. 2,000); Capital Reserve Rs. 2,000].

16. Kamal Ltd. was formed for the purpose of purchasing Rajesh Ltd. and was registered with a nominal capital of Rs. 2,00,000 divided into 2,000 equity shares of Rs. 100 each. 1,000 shares were issued as fully paid to the vendors in payment of the purchase consideration. The remaining 1,000 shares were offered for public subscription at a premium of Rs. 5 per share payable as under :

On Application Rs. 10 per share
On Allotment Rs. 25 per share (including premium)
On First call Rs. 40 per share
On Final call Rs. 30 per share.

Applications were received for 900 shares which were duly allotted, and the allotment money was received in full. At the time of the first call a shareholder who held 100 shares failed to pay the first call money and his shares were forfeited. These shares were re-issued at Rs. 60 per share, Rs. 70 per share paid. Final call has not been made.

You are required to (*i*) give necessary journal entries to record the above transactions, and (*ii*) prepare the Balance Sheet of the Company.

(Adapted from Delhi SSCE, 1984)

(Bank Balance Rs. 69,500; Assets Rs. 1,00,000; Share Capital Rs. 1,63,000 ; Share Premium Rs. 4,500 ; Capital Reserve Rs. 2,000).

17. Gopal Ltd., with an authorised capital of Rs. 4,00,000 divided into shares of Rs. 10 each, offered to the public 20,000 equity shares of Rs. 10 each at a premium of Re. 1 per share. The payment was to be made as follows:

With application	Rs. 2
On allotment	Rs. 4 (including premium)
On first call	Rs. 2·50
On second call	Rs. 2·50

Applications were received for 41,000 shares. Applications for 1,000 shares were rejected, and on the remaining applications, shares were allotted on a *pro rata* basis. The directors made both the calls. One shareholder, holding 50 shares, failed to pay the two calls and as a consequence his shares were forfeited. Later, these shares were re-issued as fully paid @ Rs. 9 per share.

Prepare the Cash Book and the Journal on the basis of the information given above. *(Delhi SSCE, 1987)*

(Cash Balance Rs. 2,20,200. Capital Reserve Rs. 200).

18. Dipali Enterprises Limited issued a prospectus inviting applications for 40,000 Equity shares of Rs. 10 each at a premium of Rs. 4 per share, payable as follows :

On application	Rs. 2 per share
On allotment	Rs. 7 per share (including premium).
On first call	Rs. 3 per share
On second call	Rs. 2 per share.

Applications were received for 60,000 shares and allotment was made *pro rata* to the applicants of 48,000 shares, the remaining applications being refused. Money received in excess on the application was adjusted towards the amount due on allotment.

J, to whom 800 shares were allotted, failed to pay allotment money and on his failure to pay the first call, his shares were forfeited. A, the holder of 1,200 shares, failed to pay the two calls and so his shares were also forfeited. All these shares were sold to M, credited as fully paid for Rs. 8 per share.

Pass necessary journal entries to record the above issue of shares by the company. *(Adapted from Delhi SSCE, 1986)*

(Amount transferred to Capital Reserve Rs. 3,920)

19. A limited company issued a prospectus inviting applications for 20,000 shares of Rs. 10 each at a premium of Rs. 2 per share payable as follows :

On application	Rs. 2
On allotment	Rs. 5 (including premium)
On first call	Rs. 3
On second and final call	Rs. 2.

Applications were received for 30,000 shares and *pro rata* allotment was made on the applications for 24,000 shares. Money overpaid on applications was employed on account of sum due on allotment.

Ramesh, to whom 400 shares were allotted, failed to pay the allotment money and on his subsequent failure to pay the first call, his shares were forfeited. Mohan, the holder of 600 shares, failed to pay the two calls, and his shares were forfeited after the second call.

Of the shares forfeited 800 shares were sold to Krishna credited as fully paid for Rs. 9 per share, the whole of Ramesh's shares being included.

Show Journal Entries and the Balance Sheet.

(*Adapted from All India SSCE, 1987*)

[Bank Balance Rs. 2,40,360; Share Capital Rs. 1,99,000 (including Shares Forfeited Rs. 1,000); Capital Reserve Rs. 2,160; Share premium Rs. 39,200].

20. A company invited applications for 50,000 equity shares of Rs. 10 each on the following terms :

On application	Rs. 3
On allotment	Rs. 2
On first and final call	Rs. 5.

Applications were received for 1,10,000 shares. It was decided (*i*) to refuse allotment to the applicants for 10,000 shares, (*ii*) to allot 50% to X who had applied for 20,000 shares, (*iii*) to allot in full to Y who had applied for 10,000 shares, (*iv*) to allot balance of the available shares *pro rata* among the other applicants, and (*v*) to utilise excess application money in part payment of allotment and first and final call.

Give journal entries till the stage of allotment assuming that the entire sum due on allotment is received in full. (*All India SSCE 1984*)

(Amount adjusted towards : Allotment Rs. 80,000, Call Rs. 7,000. Returned Rs. 20,000).

PRACTICAL EXERCISES—II

1. A company was registered on 1st June, 1989, with a capital of Rs. 10,00,000 divided into 10,000 shares of Rs. 100 each. It offered to the public for subscription 5,000 shares at a premium of Rs. 10 per share payable, Rs. 25 per share on application, Rs. 35 (including the premium) on allotment and the balance two months after allotment.

All the shares were taken up by the public and allotted on 15th June 1989

Give the necessary Cash Book and Journal Entries, assuming that all sums due have been received.

(Cash Balance Rs. 5,50,000).

2. A company issues 15,00,000 shares of the value of Rs. 10 each, payable Rs. 3 on application, Rs. 3 on allotment and Rs. 4 on first and final call. All the shares are subscribed and duly allotted and the call is made. All cash is duly received except the call money on 3,000 shares. These shares are subsequently forfeited by the Directors and are resold as fully paid for Rs. 18,000.

Give the necessary Journal Entries for the above transactions and prepare the Balance Sheet.

(Capital Reserve Rs. 6,000. Balance Sheet Total Rs. 1,50,06,000).

3. Give necessary Journal Entries in respect of forfeiture and re-issue of shares in each of the following cases :

(*i*) The directors of M. Ltd. resolved on 1st May, 1989 that 2,000 Equity Shares of Rs. 10 each, Rs. 7·50 paid, be forfeited for non-payment of final call of Rs. 2·50. On 10th June, 1989, 1,800 of these shares were re-issued for Rs. 6 per share.

(*ii*) X Ltd. forfeited 100 shares of Rs. 10 each (Rs. 8 called up) issued at a discount of 10% to Suresh on which he had paid Rs. 2 per share. Out of these, 50 shares were re-issued to Ram as Rs. 8 called up for Rs. 6 per share.

(*iii*) Monica, who was allotted 50 shares of Rs. 10 each by a company, failed to pay final call of Rs. 4. These shares were forfeited and re-issued to Seema at Rs. 10 each. These shares were originally issued at 10% discount.

(*Delhi SSCE, 1985*)

[(*i*) Capital Reserve Rs. 6,300. Shares Forfeited Account Rs. 1,500. (*ii*) Capital Reserve Rs. 50. Shares Forfeited Account Rs. 100. (*iii*) Capital Reserve Rs. 250].

4. Journalise the transactions of forfeiture and re-issue of shares :

(*i*) A company has an issued capital of Rs. 2,00,000 in shares of Rs. 10 each fully paid with the exception of 200 shares on which only Rs. 5 per share has been paid. These 200 shares are forfeited for non-payment of calls and subsequently re-issued as fully paid up at the price of Rs. 7·50 per share.

(*ii*) The directors of a company forfeited 100 equity shares of Rs. 10 each (fully called) on which Rs. 400 had been paid. 50 of these shares were re-issued upon payment of Rs. 300. (*Delhi SSCE, 1985*)

(*iii*) A company forfeited 100 shares of Rs. 10 each issued at 10% discount (to be taken into account at the time of allotment) on which first call money of Rs. 3 was not received ; the final call of Rs. 2 is not yet made. These shares were subsequently re-issued at Rs. 7 per share as Rs. 8 paid up.

(*Adapted from All India SSCE, 1989*)

[(*i*) Capital Reserve Rs. 500. (*ii*) Shares Forfeited Account Rs. 200. (*iii*) Capital Reserve 400].

5. Give necessary journal entries in the following cases :

(*a*) The directors of Devendra Ltd. resolved on 1st January, 1989 that 200 equity shares of Rs. 10 each, Rs. 8 paid, be forfeited for non-payment of final call of Rs. 2. One 1st February 100 of these shares were re-issued at Rs. 7 per share fully paid up. (*Adapted Delhi SSCE, 1983*)

(*b*) Virender Limited forfeited 20 shares of Rs. 100 each (Rs. 60 called up) issued at par to Mukesh on which he had paid Rs. 40 per share. Out of these, 15 shares were re-issued to Sanjeev as Rs. 60 paid up for Rs. 45 per share.

(*Delhi SSCE, 1983*)

(*c*) A share of Rs. 10, on which Rs. 8 has been called and Rs. 6 has been paid, is forfeited. It is re-issued for Rs. 7 as fully paid.

(*Delhi SSCE, 1982*)

[(*a*) Capital Reserve Rs. 500 ; Shares Forfeited Account Rs. 600. (*b*) Capital Reserve Rs. 375 ; Shares Forfeited Account Rs. 200. (*c*) Capital Reserve Rs. 3].

6. Asha Limited issued 1,000 shares of Rs. 100 each at par to Ujna on which she paid the application money of Rs. 20 but failed to pay the allotment money of Rs. 30 and the first call money of Rs. 40. Her shares were forfeited.

Before the second call of Rs. 10 was made, her shares were forfetied.

Pass the journal entries in the following cases :

(*a*) 300 of the forfeited shares are re-issued fully paid at Rs. 90 per share.

(*b*) 300 of the forfeited shares are re-issued fully paid at Rs. 100 per share.

(*c*) The remaining forfeited shares are re-issued fully paid at Rs. 110 per share.

(Capital Reserve Rs. 17,000. 1,000 shares will be shown as a separate category in Balance Sheet as "fully paid").

7. Z Limited issued 1,00,000 shares of Rs. 10 each at a premium of Rs. 2 payable as Rs. 2 on application, Rs. 3 on allotment (including premium), Rs. 3 on first call, and Rs. 4 on final call. Sohni, to whom 500 shares were allotted, could not pay first and second calls. Her shares were therefore forfeited by the company. 400 of these shares were reissued.

Pass Journal Entries if reissue is made at (*i*) Rs. 9, (*ii*) Rs. 10 and, (*iii*) Rs. 11, per share.

[Capital Reserve — (*i*) Rs. 800 ; (*ii*) Rs. 1,200 ; (*iii*) Rs. 1,200. Shares Forfeited Account in all three cases Rs. 300. Share Premium in case (*iii*) Rs. 400].

8. Mona Limited issued 750 shares of Rs. 10 each to Tina at a discount of Re. 1 per share. She failed to pay the final call of Rs. 4 and therefore the company forfeited her shares.

Pass Journal entries relating to forfeiture and re-issue of 500 of shares by the company at a price of (*i*) Rs. 8, (*ii*) Rs. 10, and (*iii*) Rs. 12, per share.

[Capital Reserve— (*i*) Rs. 2000 ; (*ii*) Rs. 2,500 ; (*iii*) Rs. 2,500. Share Premium in case (*iii*) Rs. 800].

9. Goodluck Limited offered for public subscription 1,00,000 shares of Rs. 10 each at a discount of Re. 1 per share, payable Rs. 3 on application, Rs. 2 on allotment, Rs. 2 on first call and Rs. 2 on final call. The Company received applications for 2,00,000 shares. It allotted shares on *pro rata* basis. The excess application money was adjusted against the allotment money and calls.

Gangadharan was allotted 500 shares. His shares were forfeited after the first call.

Journalise the transactions for forfeiture when he *failed* to pay the calls.

(Dr. Share Capital Rs. 5,000; Credit Shares Forfeited Rs. 3,000, First Call Rs. 500, Second Call Rs. 1,000 and Discount on Issue of Shares Rs. 500).

10. On 1st May 1989, the directors of a Limited Company forfeited 200 shares of Rs. 20 each, Rs. 15 per share called up, on which Rs. 10 per share had been paid by A, the amount of the first call of Rs. 5 per share being unpaid. Ten days later, the directors re-issued the forfeited shares to B credited as Rs. 15 per share paid up, for a payment of Rs. 10 per share.

Give journal entries in the Company's books to record the forfeiture of shares and their re-issue.

(Capital Reserve Rs. 1,000).

11. Rajan & Co. commenced business with an authorised capital of Rs. 20,00,000 in Rs. 10 shares. Of these 4,000 shares were issued as fully paid in payment of Buildings purchased ; and applications were invited for 50,000 shares payable as follows :

On application	Rs. 2
On allotment	Rs. 2
On first and final call	Rs. 5

The applications were received for 45,000 shares and all of these applications were accepted. All moneys due were received except the first and final call on 500 shares which were forfeited. 250 of these shares were reissued at Rs. 12 each as fully paid.

Pass entries in the Cash Book and Journal of Rajan & Co.

(Cash Book Balance Rs. 4,05,500).

12. A company makes an issue of 5,00,000 equity shares of Rs. 10 each at 10% discount. The *net* amount is payable as follows :

On application and allotment	Rs. 4·00
On first call	Rs. 2·50
On final call	Rs. 2·50

A shareholder holding 200 shares did not pay final call money. His shares were forfeited. Out of these 100 shares were re-issued to Y at Rs. 7 per share.

Pass Journal Entries in respect of forfeiture and re-issue of shares only.

(Adapted from All India SSCE, 1989)

(Capital Reserve Rs. 450. Shares Forfeited Account Rs. 650).

13. Accountancy Publications Ltd. issued 50,000 Equity Shares of Rs. 10 each at a premium of 10% payable as under :

On Application	Rs. 2
On Allotment	Rs. 5 (premium Re. 1)
On First Call	Rs. 2
On Final Call	Rs. 2.

The whole of the issue was called for by the company and all the moneys were duly received except the allotment and call moneys on 500 shares. These shares were, therefore, forfeited and later on re-issued at Rs. 9 per share as fully paid.

Pass the necessary journal entries to record the above transactions.

(Delhi SSCE, 1981)

(Capital Reserve Rs. 500).

14. On April 1, 1989 the directors of Ashoka Metals Ltd. issued 5,00,000 equity shares of Rs. 10 each at Rs. 12 per share, the amount payable as to Rs. 5 on application (including premium), Rs. 4 on allotment and the balance on July 15, 1989.

On April 10, 1989 applications were received for 7,00,000 shares. Of the cash received in excess from allottees, Rs. 4,00,000 were returned and Rs. 6,00,000 were applied towards the amount due on allotment. The balance

of allotment money was received on April 30, 1989. All the shareholders paid the call due on July 15, 1989, with the exception of one shareholder holding 500 shares. These shares were forfeited on August 31, 1989.

You are required to submit Journal Entries regarding the above transactions and also prepare the Balance Sheet of the Company on August 31, 1989.

(Adapted from All India SSCE, 1983)

(Balance Sheet Total Rs. 59,98,500).

15. A Ltd. having a Nominal Capital of Rs. 25,00,000 divided into 2,50,000 equity shares of Rs. 10 each offered to the public for subscription 2,00,000 equity shares at a premium of Rs. 5 per share payable as under :

On application Rs. 2 per share.
On allotment Rs. 8 per share (including premium).
On first call Rs. 2 per share.
On final call Rs. 3 per share.

All the shares offered were applied for and allotted. The allotment money was received in full. A shareholder, who held 100 shares, failed to pay the first call and his shares were forfeited. These shares were re-issued at Rs. 6 per share, Rs. 7 per share paid up. Final call has not been made.

You are required to give necessary Journal entries to record the above transactions and prepare the Balance Sheet of the Company.

(Bank Balance Rs. 24,00,400. Share Premium Rs. 10,00,000. Capital Reserve Rs. 400. Balance Sheet Total Rs. 24,00,400).

16. A company has an authorised capital of Rs. 1,00,00,000 divided into shares of Rs. 10 each. 9,00,000 of these shares were offered to the public but only 8,00,000 shares were subscribed for. The shares were issued at a premium of Rs. 2 per share. Rs. 7 per share was payable on application and allotment including the premium. The balance was payable in two equal instalments as and when the directors called. Only the first call was made. The application and allotment moneys on 8,00,000 shares were received in full. Members holding 1,000 shares failed to pay the first call money and in consequence these shares were forfeited in accordance with the provisions of the Articles of Association of the company, while members holding 500 shares paid them upto the full amount when the first call was made.

Show the Journal Entries, Cash Book entries for the above transactions and the Balance Sheet of the company.

(Cash Book Balance Rs. 75,98,750. Calls in Advance Rs. 1,250. Balance Sheet Total Rs. 75,98,750).

17. A company issued 10,000 shares of Rs. 10 each at a premium of Re. 1 per share, payment to be made as follows :

On application	Rs. 2
On allotment	Rs. 4 (including premium)
On first call	Rs. 3
On second and final call	Rs. 2.

Applications were received for 20,000 shares. Applications for 5,000 shares were rejected and allotment was made proportionately to the remaining applicants. The directors made both the calls and all the moneys were received except the final call on 400 shares, which were subsequently

forfeited. Later, 300 of the forfeited shares were reissued as fully paid @ Rs. 15 per share.

Give Journal Entries to record the above transactions and prepare the Balance Sheet of the Company. *(Delhi SSCE, 1989)*

[Bank Balance Rs. 1,13,700. Share Capital Rs. 99,800 (including Shares Forfeited Rs. 800). Share Premium Rs. 11,500. Capital Reserve Rs. 2,400. Balance Sheet Total Rs. 1,13,700].

18. A Co. Ltd. offered to the public 20,000 equity shares of Rs. 100 each at a premium of Rs. 10 per share. The payment was to be as follows :

On Application	Rs. 20
On Allotment	Rs. 40 (including premium)
On First call	Rs. 25
On Second and Final call	Rs. 25.

Applications were received for 35,000 shares. Applications for 10,000 shares were rejected. Applicants for 15,000 shares were allotted 10,000 shares and remaining applications were accepted in full. The directors made both the calls. One shareholder holding 500 shares failed to pay the two calls and as a consequence his shares were forfeited. 200 of these shares were re-issued as fully paid at Rs. 80 per share.

Expenses of issue came to Rs. 10,000.

Prepare Cash Book, the Journal and the Balance Sheet on the basis of information given above. *(All India SSCE, 1981)*

[Bank Balance Rs. 21,81,000. Share Capital Rs. 19,85,000 (including Shares Forfeited Rs. 10,000). Capital Reserve Rs. 6,000. Balance Sheet Total Rs. 21,91,000].

19. A company issued for public subscription 5,00,000 Equity Shares of Rs. 10 each at a premium of Rs. 2 per share, payable as under :

On application	Rs. 2 per share.
On allotment	Rs. 5 per share (including premium).
On first call	Rs. 2 per share.
On final call	Rs. 3 per share.

Applications were received for 7,50,000 Equity Shares. The shares were allotted *pro rata* to the applicants for 6,00,000 shares, the remaining applications being rejected. Money over-paid on applications was utilised towards sum due on allotment.

A, to whom 2,000 shares were allotted, failed to pay allotment and call moneys and B, to whom 2,500 shares were allotted, failed to pay the two calls. These shares were subsequently forfeited after the final call was made.

All the forfeited shares were sold to X as fully paid up at Rs. 8 per share.

Pass the Journal entries required to record the above transactions and prepare the Company's Balance Sheet.

(Adapted from All India SSCE, 1988, 1986, 82)

(Share Premium Rs. 9,96,000. Capital Reserve Rs. 8,300. Bank Balance Rs. 60,04,300. Balance Sheet Total Rs. 60,04,300).

20. Poonam Co. Ltd. offered to public for subscription 10,00,000 equity shares of Rs. 10 each at a premium of Re. 1 per share. Payment was to be made as follows :

On application Rs. 2

On allotment	Rs. 4 (including premium)
On first and final call	Rs. 5.

Applications were received for 20,50,000 shares. The Board of Directors rejected one application for 50,000 shares and allotted shares to other applicants on *pro rata* basis. The call was also made. All moneys were duly received except the call money on 500 shares which were forfeited after the requisite notices had been served. Later on all these forfeited shares were re-issued as fully paid @ Rs. 9 per share.

Journalise the above-mentioned transactions including cash transactions and prepare Balance Sheet of the Company.

(Capital Reserve Rs. 2,000. Balance Sheet Total Rs. 1,10,02,000).

21. Ashish Ltd. invited applications for 80,000 shares of Rs. 10 each at a premium of Rs. 2·50 per share payable as follows :

On application	Rs. 3
On allotment	Rs. 4·50 (including Premium)
On first call	Rs. 2
On second call	Rs. 3.

Applications were received for 1,70,000 shares, out of which applications for 10,000 shares were rejected and money refunded to them. The allotment was made *pro rata* to the remaining applicants. Money over-paid on application was used against allotment money due.

Anil to whom 2,000 shares were allotted failed to pay the allotment money, and on his subsequent failure to pay the first call, his shares were forfeited.

Sunil, the holder of 1,200 shares failed to pay the two calls, and his shares were forfeited after the final call. Of the forfeited shares 2,400 shares were re-issued at the rate of Rs. 8 per share credited as fully paid, including the whole of the Anil's shares forfeited.

Show necessary Journal Entries and prepare the Balance Sheet of the Company.

(Delhi SSCE, 1988)

[Share Capital Rs. 7,96,000 (including Shares Forfeited Rs. 4,000). Share Premium Rs. 1,95,000. Capital Reserve Rs. 9,200. Bank Balance Rs. 10,00,200]

22. A holds 100 shares of Rs. 10 each on which he has paid Re. 1 per share on application.

B holds 200 shares of Rs. 10 each on which he had paid Re. 1 and Rs. 2 per share on application and allotment respectively.

C holds 300 shares of Rs. 10 each and has paid Re. 1 on application, Rs. 2 on allotment and Rs. 3 on first call respectively.

They all fail to pay their arrears and the second call of Rs. 2 per share. Their shares are forfeited and subsequently re-issued at Rs. 11 per share as fully paid.

Journalise the above transactions. *(All India SSCE, 1979)*

(Capital Reserve Rs. 2,500. Share Premium Rs. 600).

23. Whiteways Ltd. acquired the following assets from Norton & Co. at a price of Rs. 3,60,000 agreed to be paid by issue of shares of Rs. 10 each :

Building	Rs. 2,60,000
Machinery	Rs. 60,000
Furniture	Rs. 40,000

Pass the journal entries in the book of Whiteways Ltd. on the assumption that shares are issued (*i*) at par, (*ii*) at a discount of 10 %, and (*iii*) at a premium of 20 %.

[(*i*) 36,000 Shares ; (*ii*) 40,000 shares ; (*iii*) 30,000 shares].

24. A limited company has a nominal capital of Rs. 2,50,00,000 in Rs. 10 shares. Of these 4,00,000 shares were issued as fully paid in payment of Building purchased. 8,00,000 shares were subscribed for by the public, and during the first year Rs. 5 per share was called up, payable Rs. 2 on application, Re. 1 on allotment, Re. 1 on first call, and Re. 1 on second call. The amounts received in respect of the following shares were as follows :

On 6,00,000 shares the full amount called.
On 1,25,000 shares Rs. 4 per share.
On 50,000 shares Rs. 3 per share.
On 25,000 shares Rs. 2 per share.

The Directors forfeited the 75,000 shares on which less than Rs. 4 had been paid. These shares were subsequently re-issued at Rs. 3 per share.

You are required to show Journal entries in the books of the company and to set out the Capital as it should appear in the company's Balance Sheet at the end of the first year. (*Adapted from All India SSCE, 1980*)

(Share Capital Rs. 75,00,000. Capital Reserve Rs. 5,000).

25. New Industries Limited issued a prospectus, inviting applications for 1,00,000 shares of Rs. 10 each at a premium of Rs. 5 per share, payable as follows :

On Application	Rs. 2·50 per share
On Allotment	Rs. 7·50 per share (including premium)
On First Call	Rs. 4·00 per share.
On Final Call	Re. 1·00 per share.

Applications were received for 1,50,000 shares and allotment was made *pro rata* to the applicants of 1,20,000 shares, the remaining being refused. Money received in excess on the application was adjusted towards the amount due on allotment.

D, to whom 2,000 shares were allotted, failed to pay allotment money and on his failure to pay the first call, his shares were forfeited. M, the holder of 3,000 shares, failed to pay the two calls, and so his shares were also forfeited. All these shares were sold to R, credited as fully paid, for Rs. 8 per share.

Pass necessary journal entries (with narration) to record the above issue of shares by the company and prepare the Company's Balance Sheet.

(*All India SSCE,1989*)

(Balance Sheet Total Rs. 15,01,000. Share Premium Rs. 4,90,000. Capital Reserve Rs. 11,000. Bank Balance Rs. 15,01,000).

Redeemable Preference Shares

26. On 1st July, 1989, a company has 2,000 12% Redeemable Preference Shares of Rs. 100 each. It decides to redeem these Shares at par out of profits otherwise available for dividend. The redemption is duly carried out.

Pass the necessary journal entries to record the above transactions if the company redeems the Preference Shares at a premium of 10 %.

(Transfer Rs. 2,00,000 to Capital Redemption Reserve Account).

27. A Co. Ltd. decided to redeem out of profits at a premium of 5 %, 5,00,000 12% Redeemable Preference Shares of Rs. 10 each fully paid. The Company has on the date of redemption Rs. 20,00,000 in the General Reserve and Rs. 40,00,000 as undistributed profits Assume minimum reduction is made in General Reserve.

Show the necessary Ledger Accounts, after the redemption is carried out.

(Transfer Rs. 50,00,000 to Capital Redumption Reserve Account—Rs. 40,00,000 from undistributed profits and Rs. 10,00,000 from General Reserve).

28. 60,000 10% Redeemable Preference Shares of Rs. 10 each fully paid of XY Co. Ltd. became due for redemption on 30th June, 1989. The company had Rs. 4,50,000 to its Reserve Fund on this day. It issued Equity Shares of the face value of Rs. 3,00,000 at a premium of 10 per cent specially for the purpose of redemption. It received cash for the full amount of the issue. The Redeemable Preference Shares are then paid out of the balance to the credit of the Reserve Fund.

Pass journal entries and show ledger accounts recording the above transactions.

(Transfer Rs. 3,00,000 to Capital Redumption Reserve Account).

29. A company issues on 1st January, 1985, 1,00,000 12% Preference Shares of Rs. 100 each, redeemable on 1st January, 1990 at a premium of Rs. 10 each.

In order to meet this obligation, a fresh issue of equity capital is made on 1st January, 1990 of 50,000 shares of Rs. 100 each at a premium of Rs. 20 per share. The balance amount necessary for redemption of Preference Shares is drawn out of the reserve created out of profits.

Give the necessary journal entries to give effect to the above transactions in the books of the company.

(Transfer Rs. 50,00,000 from reserves to Capital Redumption Reserve Account).

30. X Ltd. had issued 10,00,000 12 per cent Redeemable Preference Shares of Rs. 10 each which were due for redemption on March 31, 1989.

On March 31 the directors decided to use the balance of Rs. 50,00,000 standing to the credit of Reserve Fund and Rs. 20,00,000 from the balance to the credit of Profit and Loss Account, for the purpose of redeeming the Preference Shares, and to issue Rs. 10 Equity Shares at a premium of Rs. 2 per share on issue, to provide the balance required.

Show by means of journal entries how the above transactions should be recorded in the books of X Ltd.

(Transfer Rs. 70,00,000 to Capital Redumption Reserve Account).

31. A company's share capital consists of 1,00,000 equity shares of Rs. 10 each fully paid and 50,000 12% redeemable preference shares of Rs. 10 each fully paid, redeemable at a premium of Re. 1 per share. The

company had a credit balance of Rs. 4,00,000 on profit and loss account and Rs. 5,00,000 on general reserve. The company resolved :

(*a*) To redeem the preference shares.

(*b*) To issue 30,000 equity shares of Rs. 10 each at Rs. 11·25 per share in order to provide part of the funds for the redemption of the preference shares.

The resolutions were carried into effect. You are required to show :

(*i*) the necessary ledger accounts to record the above transactions ; and

(*ii*) the share capital and reserves of the company as they would appear in its balance sheet after the redemption.

(Transfer Rs. 2,00,000 to Capital Redemption Reserve Account).

32. Following is the Balance Sheet of A Ltd. as at 31st March, 1990 :

Liabilities	Rs.	*Assets*	Rs.
Share Capital :		Sundry Assets	80,00,000
50,000 Equity Shares of Rs. 100 each, fully paid	50,00,000	Cash at Bank	22,00,000
15,000 12 % Redeemable Preference Shares of Rs. 100 each, fully paid	15,00,000		
Share Premium Account	5,00,000		
Profit and Loss A/c	20,00,000		
Creditors	12,00,000		
	1,02,00,000		1,02,00,000

The Company decides to redeem the Preference Shares at a premium of 5% after complying with the requirements of Sec. 80 of the Companies Act, 1956.

Pass the necessary Journal Entries and show the amended Balance Sheet.

(Transfer Rs. 15,00,000 to Capital Redemption Reserve Account).

Company Accounts—Debentures

The Memorandum of Association of a company usually confers a power on it to borrow. A trading company has implied power to borrow for the purposes of the business of the company even though there is no such express provision in the Memorandum.

The most usual form of borrowing by a company is by the issue of debentures through a prospectus. A *debenture* is a document which either creates a debt or acknowledges a debt.

The characteristic features of a 'debenture' are as follows :

1. It is issued by a company and is usually in the form of a certificate which is an acknowledgement of debt.

2. It is issued under the company's seal.

3. It is one of a series. But a single debenture is also not uncommon.

4. It usually specifies a particular period or date as the date of repayment. It also provides for the payment of a specified principal and interest at the specified date. But a company is not debarred from issuing perpetual or irredeemable debentures.

5. It generally creates a charge on the undertaking of the company or some part of its property ; but there may be debentures without any such charge.

6. A debenture-holder does not have any right to vote in the company meetings.

Nature of Debenture

As already observed a debenture is a document acknowledging debt. Whereas shares represent share capital of a company, debentures represent loan capital which is returnable after some period.

The nature of debenture would also be clear from the following discussion which deals with distinction between a 'Share' and a 'Debenture'.

DEBENTURE DISTINGUISHED FROM SHARE

1. *Share capital and loan capital.* A share is a part of equity or share capital of a company whereas a debenture is a part of loan capital of the company. The holder of a share may be described as a *part owner* (but legally speaking shareholders are not owners—they have only sme rights against the company, *e.g.*, right to receive dividend, right to attend meetings of the company and vote thereat and right to receive whatever is left after outside liabilities have been met at the time of winding up of the company) whereas the holder of a debenture is the *creditor* of the company.

2. *Dividend and interest.* Return on a share is known as *dividend* whereas return on a debenture is known as *interest.* Dividend is declared by a company only when there are profits, and as such its quantum may vary. The larger the divisible profits, the larger the dividend, and may be that in some years when profits are inadequate, the company may not declare dividend. Interest on debentures at a fixed rate is however compulsorily payable.

3. *Appropriation of profit and charge against profit.* Dividend payable on shares is an appropriation of profit (and is therefore shown in the Profit and Loss Appropriation Account) whereas interest payable on debentures is a charge against profit (and is therefore shown in the Profit and Loss Account).

4. *Redemption.* Share capital is not to be returned during the lifetime of a company except when reduction of capital takes place. There are very stringent statutory conditions which have to be complied with before the share capital can be returned. If a company has issued redeemable preference shares, the amount received on them has got to be returned. The amount received on debentures has however got to be returned in accordance with the terms of their issue. This is called redemption of debentures.

5. *Issue at a discount.* Shares can be issued at a discount subject to the conditions contained in Sec. 79 of the Companies Act, 1956 (discussed in the previous Chapter). Debentures can be issued at a discount unless the Articles provide otherwise. No formalities, like the ones in case of issue of shares, have to be gone through.

It should, however, be noted that convertible debentures cannot be issued at a discount entitling holders to exchange them for shares at face value, as this would be an indirect method of issuing shares at a discount. If convertible debentures are to be issued at a discount, compliance with Sec. 79 would be necessary.

6. *Premium on issue.* The premium received on issue of shares can be utilised subject to conditions contained in Sec. 78 of the Companies Act, 1956 (discussed in the previous Chapter). There are no such restrictions on the utilisation of premium received on issue of debentures.

7. *Charge on property.* Shares do not create any charge on the undertaking of the company or on any of the company's property. Debetures do create such a charge.

8. *Purchase.* A company cannot normally purchase its own shares. It can however purchase its own debentures.

9. *Winding up.* In winding up, debentures have a priority over shares as to return of amount received on them.

KINDS OF DEBENTURES

Debentures may be of the following kinds :

1. **Bearer debentures.** These are debentures which are payable to bearers. They are also known as unregistered debentures. They are regarded as negotiable instruments and are transferable by delivery.

2. **Registered debentures.** These are debentures which are payable to the registered holders. They are transferable in the manner specified in the conditions endorsed thereon.

3. **Secured debentures.** These are debentures which create some charge on the property of the company. The charge may be a fixed charge or a floating charge.

4. **Unsecured or naked debentures.** These debentures are like ordinary unsecured creditors of the company and do not have any charge on the assets of the company. The holders of these debentures may sue the company for the recovery of the debt.

5. **Redeemable debentures.** Debentures are usually issued on the condition that they shall be redeemed after a certain period. Such debentures are known as redeemable debentures.

6. **Perpetual debentures.** When the debentures are irredeemable, they are called perpetual debentures. They are not invalid because of the condition that they are made irredeemable or redeemable only on the happening of a contingency, however remote, or on the expiration of a period, however long.

7. **Convertible/non-convertible debentures.** Convertible debentures give an option to the holders to convert them into preference or equity shares at stated rates of exchange, after a certain period. If no such option is given to the debenture-holders, the debenture is known as a non-convertible debenture.

MANNER OF ISSUE OF DEBENTURES

Debentures are mostly issued in a manner similar to the issue of shares by means of a prospectus inviting applications. The money may be payable by instalments on application, allotment and calls. But usually the amount is payable in one lump sum.

The terms of issue of debentures are usually contained on their back. The three most important terms are :

1. *Rate of interest.* The interest on debentures is payable at a fixed rate irrespective of the fact whether the company earns any profit or not. The interest, unlike dividend on shares, is a charge against the profits of the company. Rate of interest is usually prefixed to debentures as "14% Debentures" or "12% Fully Convertible Debentures". This means "debentures" carry interest at the rate of 14% or 12% per annum.

2. *Issue price.* Debentures, like shares, may be issued at par, at a premium, or at a discount. There are no statutory restrictions on issue of debentures at a discount or use of premium received on issue of debentures.

There is, however, one legal restriction on issue of convertible debentures. They cannot be issued at a discount entitling the debenture-holders to exchange them for shares of par value as this would be an indirect method of issuing shares at a discount. If convertible debentures are to be issued at a discount, compliance with Sec. 79 of the Companies Act, 1956

(which deals with issue of shares at a discount—discussed in the previous Chapter) would be necessary.

3. *Period of debentures and the manner of their redemption.* Debentures, as already observed, represent a loan taken by the company. The period of loan must be specified in the terms of the debentures. Return of the amount received on debentures is called redemption of debentures. The manner of redemption must also be specified in the terms of issue of debentures.

ISSUE OF DEBENTURES

The following three factors are taken into account at the time of issue of debentures:

1. The face value of debentures.
2. The issue price of debentures. The debentures may be issued—

(*a*) At par,
(*b*) At a discount, or
(*c*) At a premium.

3. The value at which the debentures are to be redeemed, *i.e.*, paid back. The debentures may be redeemed—

(*a*) At par,
(*b*) At a discount, or
(*c*) At a premium.

The various cases of issue of debentures may, therefore, be as follows:

Face value	*Issued at*	*Redeemable at*
		Rs. 95 (Case 1)
Rs. 100	Rs. 95	Rs. 100 (Case 2)
		Rs. 105 (Case 3)
		Rs. 95 (Case 4)
Rs. 100	Rs. 100	Rs. 100 (Case 5)
		Rs. 105 (Case 6)
		Rs. 95 (Case 7)
Rs. 100	Rs. 105	Rs. 100 (Case 8)
		Rs. 105 (Case 9)

Of these nine cases of issue of debentures, only five cases (*i.e.*, cases 2, 3, 5, 6 and 8) are practical cases and have been discussed in detail.

A company may receive applications for—

(1) the number of debentures it has offered to the public for subscription.

(2) a larger number of debentures than it has offered to the public for subscription (This is a case of *over-subscription*). In such a case, it may allot debentures on *pro rata* basis or on *ad hoc* basis. Usually the company stops receiving the amount on debentures when the applications for the number of debentures offered to the public for subscription are received. If that is to be so, prospectus must contain a term to that effect.

(3) a smaller number of debentures than it has offered to the public for subscription (This is a case of *under-subscription*).

The above cases are now considered one by one, but not in the order given above.

It is assumed that the face value of debentures is Rs. 100. Further when a case of issue of debentures is referred to as Rs. 100–Rs.100–Rs.100, this means that a debenture of Rs. 100 is issued at Rs. 100 and is repayable at Rs. 100. Thus a case of Rs. 100–Rs. 95–Rs. 105 would mean that a debenture of Rs. 100 is issued at Rs. 95 (*i.e.*, at a discount) and is repayable at Rs. 105 (*i.e.*, at a premium).

Case 5 – Issue of Debentures at par repayable at par (*Rs. 100–Rs. 100–Rs. 100*)

Entries on Issue of Debentures

1. *If the amount is received in instalments*

(*a*) *On receipt of application money :*

Bank A/c	Dr.		
To Debenture Application A/c			
(Being amount received from sundry applicants on application on...... Debentures @ Rs.......per debenture)			

In Practical System of Book-keeping, this entry is recorded in Cash Book.

(*b*) *On transfer of Application Money* :

Debenture Application A/c	Dr.		
To Debentures A/c			
(Being transfer of Debenture Application Money to Debentures A/c on Allotment)			

And so on. But note the difference between the entries on the issue of shares and issue of debentures. In the latter case, *not* Debentures Capital Account but Debentures Account is credited.

2. *If the amount is received in one lump sum* :

		Rs.	Rs.
Bank A/c	Dr.	100	
To Debenture Application A/c			100
(Being the receipt of Application Money on issue of ......Debentures of Rs....... each as fully paid)			
Debenture Application A/c	Dr.	100	
To Debentures A/c			100
(Being transfer of Application Money on ......Debentures of Rs.......each to Debentures A/c)			

Illustration 1. XYZ Co. Ltd. issued 10,000 14% Debentures of Rs. 100 each, payable as Rs. 20 on application, Rs. 30 on allotment, and the balance on first and final call. The Company received applications for 10,000 Debentures. All the money was duly received.

(*a*) Pass the Journal Entries in the books of the Company.

(*b*) What will be the Journal Entry/Entries if the amount is received by the Company in one lump sum ?

Solution :

(*a*) JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To 14% Debenture Application A/c (Being receipt of Application Money at the rate of Rs. 20 per debenture on 10,000 14% Debentures)		2,00,000	2,00,000
	14% Debenture Application A/c Dr. To Debentures A/c (Being transfer of Debenture Application Money to 14% Debentures A/c)		2,00,000	2,00,000
	14% Debenture Allotment A/c Dr. To 14% Debentures A/c (Being the amount due on Allotment of 10,000 14% Debentures at the rate of Rs. 30 per debenture)		3,00,000	3,00,000
	Bank A/c Dr. To 14% Debenture Allotment A/c (Being receipt of amount due on allotment of 10,000 14% Debentures)		3,00,000	3,00,000
	14% Debenture First & Final Call A/c Dr. To 14% Debentures A/c (Being the amount due on First & Final Call at the rate of Rs. 50 per debenture on 10,000 14% Debentures)		5,00,000	5,00,000
	Bank A/c Dr. To 14% Debenture First & Final Call A/c (Being receipt of First and Final Call on 10,000 14% Debentures)		5,00,000	5,00,000

(*b*) JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To 14% Debenture Application A/c (Being entry for receipt of Application Money on 10,000 14% Debentures of Rs. 100 each)		10,00,000	10,00,000
	14% Debenture Application A/c Dr. To 14% Debentures A/c (Being entry on transfer of Application Money on 10,000 14% Debentures to Debentures A/c)		10,00,000	10,00,000

Illustration 2. Star Limited offered 20,000 13% Debentures of Rs. 100 each for public subscription through Prospectus, payable as follows :

Rs. 50 on application,
Rs. 50 on allotment.

The Company received applications for 80,000 Debentures. Allotment was made as follows :

(1) To applicants of 5,000 Debentures — full allotment ;

(2) To applicants of 8,000 Debentures — 5,000 Debentures ;

(3) To applicants of 22,000 Debentures — 5,000 Debentures ;

(4) To applicants of 30,000 Debentures — 5,000 Debentures ;

(5) To applicants of 15,000 Debentures — Nil.

The excess money received on application was to be adjusted towards allotment. The Company received all the money due on allotment except from one debenture-holder allotted 50 debentures in category (2) of allottees. Debenture issue expenses are Rs. 20,000.

Pass Journal Entries in the books of the Company if the amount is received (*a*) in the above manner, (*b*) in one lump sum and the full amount is received with application. Also prepare the Ledger Accounts of the Company in both the cases.

Solution :

(*a*) JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To 13% Debenture Application A/c (Being entry for receipt of Application Money on 80,000 Debentures @ Rs. 50 per debenture)		40,00,000	40,00,000

			Rs.	Rs.
	13% Debenture Application A/c Dr.		40,00,000	
	To 13% Debentures A/c			10,00,000
	To 13% Debenture Allotment A/c			6,50,000
	To Bank A/c			23,50,000
	(Being transfer of Debenture Application Money on 20,000 debentures to 13% Debentures A/c– adjustment of surplus money to Debenture Allotment A/c– and return of surplus money to those allotted smaller number of debentures and to those not allotted any debenture)			
	13% Debenture Allotment A/c Dr.		10,00,000	
	To 13% Debentures A/c			10,00,000
	(Being amount due on account of Allotment Money on 20,000 Debentures @ Rs. 50 per debenture)			
	Bank A/c Dr.		3,49,000	
	To 13% Debenture Allotment A/c			3,49,000
	(Being entry for receipt of Debenture Allotment Money *less* already received, *less* not received from an allottee of 50 debentures)			
	Debenture Issue Expenses A/c Dr.		20,000	
	To Bank A/c			20,000
	(Being payment of Debenture Issue Expenses)			

LEDGER

DEBENTURE APPLICATION ACCOUNT

Dr.	Rs.		Cr. Rs.
To 13% Debentures A/c	10,00,000	By Bank	40,00,000
To 13% Debenture Allotment A/c	6,50,000		
To Bank	23,50,000		
	40,00,000		40,00,000

13% DEBENTURES ACCOUNT

Dr.	Rs.		Cr. Rs.
To Balance c/d	20,00,000	By 13% Debenture Application A/c	10,00,000
		By 13% Debenture Allotment A/c	10,00,000
	20,00,000		20,00,000
		By Balance b/d	20,00,000

Dr.	13% DEBENTURE ALLOTMENT ACCOUNT		Cr.
	Rs.		Rs.
To 13% Debentures A/c	10,00,000	By 13% Debenture Appli ation A/c	6,50,000
		By Bank	3,49,000
		By Balance c/d	1,000
	10,00,000		10,00,000

Working Notes :

(1) CHART showing adjustment of DEBENTURE APPLICATION MONEY

Applicants	No. of Deb. applied for	No. of Debentures allotted	Application Money received	Adjusted towards		Returned
				Application	Allotment	
			Rs.	Rs.	Rs.	Rs.
(1)	5,000	5,000	2,50,000	2,50,000		
(2)	8,000	5,000	4,00,000	2,50,000	1,50,000	
(3)	22,000	5,000	11,00,000	2,50,000	2,50,000	6,00,000
(4)	30,000	5,000	15,00,000	2,50,000	2,50,000	10,00,000
(5)	15,000		7,50,000			7,50,000
	80,000	20,000	40,00,000	10,00,000	6,50,000	23,50,000

(2) Amount received on Allotment has been calculated as follows :

	Rs.
Amount Due	10,00,000
Less amount adjusted from Application Money	6,50,000
	3,50,000
Less amount not received from defaulter of 50 debentures : Due Rs. 2,500 *less* received excess with application Rs.1,500	1,000
Amount received	3,49,000

(*b*) JOURNAL

	Particulars		Rs.	Rs.
	Bank A/c Dr. To 13% Debenture Application A/c (Being entry for receipt of Application Money on 80,000 debentures @ Rs. 100 per debenture)		80,00,000	80,00,000
	13% Debenture Application A/c Dr. To 13% Debentures A/c To Bank A/c (Being entry for transfer of Debenture Application Money to 13% Debentures A/c and return of surplus money)		80,00,000	20,00,000 60,00,000

LEDGER

Dr. 13% DEBENTURE APPLICATION ACCOUNT Cr.

	Rs.		Rs.
To 13% Debentures A/c (transfer)	20,00,000	By Bank A/c (on 80,000 debentures @ Rs. 100 each)	80,00,000
To Bank A/c (refund)	60,00,000		
	80,00,000		80,00,000

Dr. 13% DEBENTURES ACCOUNT Cr.

	Rs.		Rs.
To Balance c/d	20,00,000	By 13% Debenture Application A/c	20,00,000
		By Balance b/d	20,00,000

Case (8)— Issue of Debentures at a premium repayable at par *(Rs. 100–Rs. 105–Rs. 100)*

If the amount is received in instalments, the entry for Premium on Issue of Debentures will be passed along with the instalment (application, allotment, first call, etc.) with which it is due. The entries for issue of debentures in this case are on the same lines as on issue of shares at a premium.

If the amount is received in one lump sum, the following Journal Entries will be passed :

		Dr.	Cr.
Bank A/c	Dr.	105	
To Debenture Application A/c			105
(Being entry for receipt of Application Money on ......Debentures of Rs....... each, fully called)			
Debenture Application A/c	Dr.	105	
To Debentures A/c			100
To Premium on Issue of Debentures A/c			5
(Being transfer of Application Money on ......Debentures @ Rs...... per debenture to Debentures A/c and Rs. 5 per debenture to Premium on Issue of Debentures A/c)			

The above two entries may be combined into one entry which will be as follows :

		Dr.	Cr.
Bank A/c	Dr.	105	
To Debentures A/c			100
To Premium on Issue of Debentures A/c			5
(Being receipt of amount on issue of ...... Debentures of Rs...... each at a premium of Rs.......per debenture, repayable at par)			

Illustration 3. Vardhman Limited offered to the public 5,000 14% Debentures of Rs. 250 each at a premium of Rs. 50, payable Rs. 150 (including premium of Rs. 25) on application and balance on allotment. The Company received applications for 10,000 Debentures. It made allotment on *pro rata* basis to applicants for 6,000 Debentures. All the money due on allotment was received. One allottee for 500 Debentures paid the full amount at the time of application.

Pass the Journal Entries in the books of the Company to record the above issue of Debentures and prepare Balance Sheet also.

Solution

JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To 14% Debenture Application A/c (Being entry for receipt of Debenture Application Money on 9,500 debentures @ Rs. 150 per debenture and on 500 debentures @ Rs. 300 per debenture)		15,75,000	15,75,000
	14% Debenture Application A/c Dr. To 14% Debentures A/c To Premium on Issue of 14% Debentures A/c To 14% Debenture Allotment A/c To Bank A/c (Being entry for transfer of Debenture Application Money to 14% Debentures A/c @ Rs. 125 per debenture, to Premium on Issue of Debentures A/c @ Rs. 25 per debenture, transfer of surplus received from *pro rata* allottees to 14% Debenture Allotment A/c, and return of Application Money to applicants of 4,000 debentures refused allotment)		15,75,000	6,25,000 1,25,000 2,25,000 6,00,000
	14% Debenture Allotment A/c Dr. To 14% Debentures A/c To Premium on Issue of 14% Debentures A/c (Being entry for amount due on 14% Debentures Allotment @ Rs. 150 per debenture, including premium of Rs. 25 per debenture, on 5,000 debentures)		7,50,000	6,25,000 1,25,000
	Bank A/c Dr. To 14% Debenture Allotment A/c (Being entry on receipt of 14% Debenture Allotment Money *less* amount already received with Applications)		5,25,000	5,25,000

BALANCE SHEET OF VARDHMAN LTD., as at.........

Liabilities	Rs.	*Assets*	Rs.
RESERVES AND SURPLUS		CURRENT ASSETS	
Premium on Issue of Debentures	2,50,000	Bank	14,50,000
SECURED LOANS			
14% 5,000 Debentures of Rs. 250 each	12,50,000		

Premium on Issue of Debentures. Premium received on issue of debentures by a company is a gain from the point of view of the company. There is no statutory restriction on the company as to the utilisation of this amount. The company may treat it either as a revenue gain or capital gain. In practice however the companies treat Premium on Issue of Debentures as a *capital profit* since it is not earned in the normal course of business. As such the companies use it for writing off Discount on Issue of Shares/Debentures or some fictitious/intangible assets.

Case 2— Issue of Debentures at a discount repayable at par (*Rs.100–Rs.95–Rs.100*)

As regards issue of debentures at a discount, no legal formalities have to be complied with. The company may allow any discount on issue of debentures.

If debentures are issued at a discount repayable at par and the amount is received in instalments, the entry for discount will be passed along with the allotment entry. The entries for receipt of Application Money and its transfer to Debentures Account will be same as explained earlier. The entries for allotment and receipt of Allotment Money are as follows :

Debenture Allotment A/c Dr.
Discount on Issue of Debentures A/c Dr.
To Debentures A/c
(Being entry for amount due on allotment of......Debentures @ Rs....... per debenture, Rs. 5 per debenture being discount)

Bank A/c Dr.
To Debenture Allotment A/c
(Being entry for receipt of Allotment Money on......Debentures @ Rs....... per debenture)

It would be noted that the above two entries are on the same lines as on issue of shares at a discount, except that instead of crediting Share Capital Account, Debentures Account is credited.

If the amount on issue of debentures at a discount repayable at par is received in one lump sum, the Journal Entries would be as follows :

		Rs.	Rs.
Bank A/c	Dr.	95	
To Debenture Application A/c			95
(Being receipt of amount on issue of ... ... Debentures of Rs.......each at a discount of Rs. 5 per debenture, repayable at par)			
Debenture Application A/c	Dr.	95	
Discount on Issue of Debentures A/c	Dr.	5	
To Debenture Application A/c			100
(Being transfer of Debenture Application Money to Debentures A/c, Rs. 5 per debenture being discount)			

Illustration 4. Gungun Limited invited applications for issue of 10,000 14% Partly Convertible Debentures of Rs. 100 each at a discount of 5% repayable at par, payable as Rs. 40 on application and balance on allotment. The Company received applications for 9,000 debentures which it duly allotted. (*a*) Pass Journal Entries to record the above issue assuming that full amount is received on allotment. (*b*) Also give the Journal Entry if the amount is received in one lump sum along with the application. (*c*) Prepare Balance Sheet of the Company.

Solution :

(*a*) JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To 14% Convertible Debenture Application A/c (Being entry on receipt of Application Money on 9,000 14% Convertible Debentures @ Rs. 40 per debenture)		3,60,000	3,60,000
	14% Convertible Debenture Application A/c Dr. To 14% Convertible Debentures A/c (Being entry on transfer of Debenture Application Money to 14% Convertible Debentures A/c)		3,60,000	3,60,000
	14% Convertible Debenture Allotment A/c Dr. Discount on Issue of 14% Convertible Debentures A/c Dr. To 14% Convertible Debentures A/c (Being entry for amount due on allotment of 9,000 14% Convertible Debentures @ Rs. 55 per debenture, Rs. 5 per debenture being discount on issue)		4,95,000 45,000	5,40,000

			Rs.	Rs.
	Bank A/c Dr. To 14% Convertible Debenture Allotment A/c (Being entry on receipt of Debenture Allotment Money on 9,000 14% Convertible Debentures @ Rs. 55 per debenture)		4,95,000	4,95,000

(*b*) JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To 14% Convertible Debenture Application A/c (Being entry on receipt of Debenture Application Money on 9,000 14% Convertible Debentures @ Rs. 95 per debenture, Rs. 5 per debenture being discount)		8,55,000	8,55,000
	14% Convertible Debenture Application A/c Dr. Discount on Issue of 14% Convertible Debentures A/c Dr. To 14% Convertible Debentures A/c (Being entry on transfer of Debenture Application Money to 14% Convertible Debentures of Rs. 100 each, Rs. 5 per debenture being discount)		8,55,000 45,000	9,00,000

(*c*) BALANCE SHEET OF GUNGUN LIMITED

Liabilities	Rs.	*Assets*	Rs.
SECURED LOANS 9,000 14% Convertible Debentures	9,00,000	CURRENT ASSETS Bank	8,55,000
		MISCELLANEOUS EXPENDITURE Discount on Issue of 14% Convertible Debentures	45,000

Discount on Issue of Debentures Account. Its treatment will be explained after discussing the next two cases of issue of debentures.

Case (6)— Issue of Debentures at par repayable at a premium (*Rs.100–Rs.100–Rs.105*)

The Journal Entries in this case are as follows :

		Rs.	Rs.
Bank A/c	Dr.	100	
To Debenture Application A/c			100
(Being receipt of Debenture Application Money on ......debentures @ Rs....... per debenture)			

		Rs.	Rs.
Debenture Application A/c	Dr.	100	
Loss on Issue of Debentures A/c	Dr.	5	
To Debentures A/c			100
To Premium on Redemption of Debentures A/c			5
(Being entry for transfer of Debenture Application Money received on...... Debentures of Rs......each issued at par repayable at a premium of Rs. 5 per debenture)			

Loss on issue of debentures. Loss on issue of debentures may be distinguished from discount on issue of debentures.

Let us compare the following two cases of issue of debentures :

(1) Rs. 100–Rs. 95–Rs.100

(2) Rs. 100–Rs.100–Rs.105.

In case (1) Rs. 95 (Rs. 100–Rs. 5 discount) are received at the time of issue. Rs. 5 is discount on issue of debentures. At the time of redemption Rs. 100 are to be paid.

In case (2) Rs. 100 are received at the time of issue whereas Rs. 105 are to be returned at the time of redemption thus resulting in a loss of Rs. 5. This loss is known at the time of issue of debentures and hence it is taken into account.

At the same time, there will be a liability of Rs. 105 at the time of redemption, Rs. 100 on account of debentures and Rs. 5 on account of premium payable at the time of redemption. Since this liability is known at the time of issue of debentures, provision for this liability is made by crediting Premium on Redemption of Debentures Account. It should be carefully noted that whereas Premium on Issue of Debentures is a gain, Premium on Redemption of Debentures is a liability.

Illustration 5. Brite Star Ltd. offered for public subscription 40,000 14% Fully Secured Debentures of Rs. 100 each at par. As an incentive to the public to subscribe for these Debentures, it offered to pay Rs. 105 per debenture at the time of redemption. The Company received applications for 80,000 Debentures along with full amount.

Applicants for 60,000 debentures were allotted the debentures on *pro rata* basis.

Pass Journal Entries in the books of the Company and prepare its Balance Sheet.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr. To 14% Fully Secured Debenture Application A/c (Being entry on receipt of amount on 80,000 debentures @ Rs. 100 per debenture)		80,00,000	8,00,000
	14% Fully Secured Debenture Application A/c Dr.		80,00,000	
	Loss on Issue of 14% Fully Secured Debentures A/c Dr.		2,00,000	
	To 14% Fully Secured Debentures A/c			40,00,000
	To Premium on Redemption of 14% Fully Secured Debentures A/c			2,00,000
	To Bank A/c (Being entry on adjustment of Debenture Application Money–Rs. 40,00,000 to 14% Fully Secured Debentures A/c, Rs. 20,00,000 refunded to *pro rata* allottees, Rs. 20,00,000 refunded to applicants not allotted any debenture, Loss on Issue and Premium on Redemption being Rs. 2,00,000)			40,00,000

BALANCE SHEET OF BRITE STAR LIMITED as at.........

Liabilities	Rs.	*Assets*	Rs.
SECURED LOANS		CURRENT ASSETS	
40,000 14% Fully Secured Debentures of Rs. 100 each	40,00,000	Bank	40,00,000
Premium on Redemption of 14% Fully Secured Debentures	2,00,000	MISCELLANEOUS EXPENDITURE Loss on Issue of 14% Fully Secured Debentures	2,00,000

Case (3)—Issue of Debentures at a discount repayable at a premium (*Rs. 100–Rs. 95–Rs. 105*)

When a debenture of, say, Rs. 100 is issued at Rs. 90 repayable at Rs. 110, the Journal Entries will be as follows :

		Rs.	Rs.
Bank A/c	Dr.	95	
To Debenture Application A/c (Being receipt of Debenture Application Money on......debentures, issued at a discount of Rs. 5 per debenture, repayable at a premium of Rs. 5 per debenture)			95

Debenture Application A/c	Dr.	95	
Loss on Issue of Debentures A/c	Dr.	10	
To Debentures A/c			100
To Premium on Redemption of Debentures A/c			5
(Being receipt of amount on issue of...... debentures of Rs......each at Rs......., repayable at a premium of Rs. 5 per debenture)			

Loss on Issue of Debenture comprises Rs. 5 which is allowed as discount at the time of issue of debentures and loss of Rs. 5 which is to be paid at the time of redemption. Discount on Issue of Debentures is also a loss and hence it has been grouped with Premium on Redemption of Debentures which is also a loss.

Illustration 6. Hardup Company Ltd. offered for public subscription 25,000 14% Debentures of Rs. 100 each at a discount of 5%. The Debentures were repayable at a premium of 5% at the time of redemption. The full amount was payable along with application.

The Company received applications for 18,000 Debentures which were duly allotted.

Pass Journal Entries in the books of the Company. Prepare its Balance Sheet also.

Solution :

JOURNAL

			Rs.	Rs.
	Bank A/c Dr.		17,10,000	
	To 14% Debenture Application A/c			17,10,000
	(Being entry on receipt of Application Money on 18,000 14% Debentures @ Rs. 95 per debenture)			
	14% Debenture Application A/c Dr.		17,10,000	
	Loss on Issue of 14% Debentures A/c Dr.		1,80,000	
	To 14% Debentures A/c			18,00,000
	To Premium on Redemption of 14% Debentures A/c			90,000
	(Being entry on transfer of Debenture Application Money on 18,000 debentures to 14% Debentures A/c @ Rs. 100 per debenture, Loss on Issue of Debentures being 5% discount at the time of issue and 5% premium at the time of redemption)			

BALANCE SHEET of HARDUP CO. LTD. as at............

Liabilities	Rs.	*Assets*	Rs.
SECURED LOANS		CURRENT ASSETS	
18,000 14% Debentures of Rs. 100 each	18,00,000	Bank	17,10,000
		MISCELLANEOUS EXPENDITURE	
		Loss on Issue of 14% Debentures	90,000

Discount or Loss on Issue of Debentures or Shares

This is a capital loss and is written off by transfer to Profit and Loss Account over a period of time. The balance of this account is shown on the assets side of the Balance Sheet under the head "Miscellaneous Expenditure (to the extent not written off or adjusted)".

Illustration 7. A company issues 10,000 14% debentures of Rs. 100 each at a discount of 5 per cent. The debentures are repayable after four years, at a premium of 5 per cent. The Loss on Issue of Debentures is to be written off evenly over the term of debentures.

Show Loss on Issue of Debentures Account. How will it appear in the Balance Sheet ?

Dr. LOSS ON ISSUE OF 14% DEBENTURES ACCOUNT Cr.

		Rs.			Rs.
First year	To Sundries	1,00,000	First year	By Profit & Loss A/c (transfer)	25,000
				By Balance c/d	75,000
		1,00,000			1,00,000
Second year	To Balance b/d	75,000	Second year	By Profit & Loss A/c (transfer)	25,000
				By Balance c/d	50,000
		75,000			75,000
Third year	To Balance b/d	50,000	Third year	By Profit & Loss A/c (transfer)	25,000
				By Balance c/d	25,000
		50,000			50,000
Fourth year	To Balance b/d	25,000	Fourth year	By Profit & Loss A/c (transfer)	25,000

You will know more about Discount or Loss on Issue of Debentures in connection with Redemption of Debentures.

ISSUE OF DEBENTURES FOR CONSIDERATION OTHER THAN CASH

A company may issue debentures for cash or for consideration other than cash. For example, when some assets are acquired, the vendor may be issued some debentures in discharge of purchase consideration. Likewise, when some one renders some service to the company, the company may issue debentures to him as price for the services. Promoters may also be allotted some debentures for their services. The Journal Entries for issue of debentures for consideration other than cash are as follows :

Asset/Promotion Expenses A/c	Dr.
To Vendor/Promoter	
(Being entry for acquisition of asset from vendor/promoter or payment due for promotion expenses)	
Vendor/Promoter	Dr.
To Debentures A/c	
(Being entry for discharge of purchase consideration/promotion expenses to vendor/promoter by issue of...... debentures of Rs......each at par)	

Illustration 8. Newage Limited acquired the following assets from Oldage Limited at values agreed upon between the two Companies :

Machinery	Rs. 98,000
Patents	Rs. 52,000
Office Equipment	Rs. 50,000

The Company issued to Oldage Limited 2,000 14% Debentures of Rs. 100 each at par. In addition, the Company also issued 500 14% Debentures to Promoters for their services.

Pass Journal Entries in the books of Newage Limited.

Solution :

JOURNAL

				Rs.	Rs.
	Machinery A/c	Dr.		98,000	
	Patents A/c	Dr.		52,000	
	Office Equipment A/c	Dr.		50,000	
	To Oldage Ltd.				2,00,000
	(Being entry for purchase of assets at agreed values from Oldage Ltd.)				
	Oldage Ltd.	Dr.		2,00,000	
	To 14% Debentures A/c				2,00,000
	(Being entry for allotment of 2,000 14% Debentures to Oldage Ltd. in discharge of purchase price of assets)				

			Rs.	Rs.
	Preliminary Expenses A/c* Dr. To 14% Debentures A/c (Being entry on allotment of 500 14% Debentures to promoters for their services)		50,000	50,000

*Note : Any expenses incurred by a company for its incorporation and to set it going are known as *preliminary expenses*. As such any amount paid to promoters in connection with incorporation of the company is debited to Preliminary Expenses Account. This account is shown in the Balance Sheet under the head "Miscellaneous Expenditure (to the extent not written off)". The amount of preliminary expenses, like discount on issue of shares/debentures, is written off over a number of years.

It may be noted that debentures may be issued to vendors/promoters at par, at a discount or at a premium. In such a case Discount/Premium on Issue of Debentures will be combined with the entry for issue of debentures. In such a case the entry for issue of debentures to vendor/promoter will be as follows :

If debentures are issued at a discount :

Vendor/Promoter Dr.
Discount on Issue of Debentures A/c Dr.
To Debentures A/c

If debentures are issued at a premium :

Vendor/Promoter Dr.
To Debentures A/c
To Premium on Issue of Debentures A/c

DEBENTURES AS COLLATERAL SECURITY

Collateral security means a secondary security.

Sometimes debentures are issued as a collateral security, particularly when money is borrowed from banks. In such a case, debentures are given to the lender as security for the loan. The lender can sell the debentures in the market in case the company fails to pay the amount on the due date, or makes some other breach in the agreement.

When money is borrowed from a bank by giving a collateral security of debentures, it is shown in the Balance Sheet under the heading "Secured Loans" as follows :

BALANCE SHEET

Liabilities	Rs.	*Assests*	Rs.
SECURED LOANS Loan from Bank (Collaterally secured by deposit of 6,000 12% Debentures of Rs. 100 each)	5,00,000		

Alternatively, the following entry may be passed in books of account :

		Rs.	Rs.
12% Debentures Suspense A/c	Dr.	6,00,000	
To 12% Debentures A/c			6,00,000
(Being entry for deposit of own 6,000 12% Debentures with Bank as a collateral security against a loan of Rs. 5,00,000)			

12% Debentures Suspense Account will appear on the assets side, and 12% Debentures Account will appear on the liabilities side of the Balance Sheet, as follows :

BALANCE SHEET of......Co. Ltd., as at.........

Liabilities	Rs.	*Assets*	Rs.
SECURED LOANS 12% Debentures (Deposited as collateral security with Bank against a loan of Rs. 5,00,000 as per contra)	6,00,000	12% Debentures Suspense A/c (6,000 12% Debentures of Rs. 100 each deposited with Bank as collateral security against a loan of Rs. 5,00,000 as per contra)	6,00,000
Loan from Bank	5,00,000		

When Loan from Bank is paid back, the Bank will return the Debentures and the above entry in Journal will be reversed.

DEBENTURE INTEREST

As already observed, debentures represent a loan. As such interest on debentures is payable as per terms of issue of debentures at a fixed rate. The interest is payable periodically, usually after every six months, on the face value (paid-up amount) of the debentures, and not on the issue price.

Debenture interest is, unlike dividend which is appropriation of profit, a charge against profits. A company is liable to pay interest on debentures irrespective of the fact whether it earns any profit or not. Further it is required to deduct income-tax at the prescribed rate from the amount of debenture interest before making any payment to debenture-holders.

The Journal Entries for interest on debentures are as follows :

When interest is due :

Profit and Loss A/c	Dr.		
To Debenture Interest A/c			
(Being interest due on......debentures of Rs......each, at......% rate of interest for the period 1st April, 19......to 30th September, 19......)			

When interest is paid :

Debenture Interest A/c	Dr.		
To Bank A/c			
To Income-tax A/c			
(Being payment of interest on...... debentures for the period at......% per annum after deducting income-tax @...... per cent)			

When Income-tax deducted from interest on debentures is deposited in the account of the Central Government, the following entry is passed:

Income-tax A/c	Dr.		
To Bank A/c			
(Being entry for deposit of Income-tax deducted from interest on debentures in Central Revenue Account)			

If at the end of the accounting period Income-tax deducted from interest on debentures is not deposited in the account of the Central Government, it will appear as a liability in the Balance Sheet.

A company normally pays interest on debentures by issuing interest warrants (which are in the form of a cheque) in favour of debenture-holders. An interest warrant consists of two parts. Part one is counterfoil which gives the name of the debenture-holder, the number of debentures held by him, gross amount of interest, income-tax on interest and net amount payable. This part is for debenture-holder's record and for submission to Income Tax Authorities. Part two of the interest warrant is cheque proper for the net amount of interest. The debenture-holder can claim payment on it by depositing it into his bank account.

Illustration 9. Everneedy Co. Ltd. issued 14% 50,000 Convertible Debentures of Rs. 100 each at a discount of 10%. The full amount was received with applications during the month of July, 1988. As per the terms of issue, interest was payable half-yearly on 30th September and on 31st March, every year. The first interest was payable from 1st July, 1988 as per the terms of issue.

Record the transactions relating to payment of interest for the year ending on 31st March, 1989 assuming that the company has deducted Income-tax at the rate of 20% before making payment to debenture-holders.

Solution

JOURNAL

1988			Rs.	Rs.
Sept.30	Profit and Loss A/c Dr.		1,75,000	
	To Debenture Interest on 14% Convertible Debentures A/c			1,75,000
	(Being entry for interest due on 50,000 14% Convertible Debentures of Rs. 100 each for the period of 3 months from 1st July, 1988 to 30th September, 1988)			

			Rs.	Rs.
	Debenture Interest on 14% Convertible Debentures A/c Dr. To Income-tax A/c (Being entry for Income-tax @ 20% deducted from Debenture Interest payable for the period 1st July 1988 to 30th September, 1988)		35,000	35,000
1989 Mar.31	Profit and Loss A/c Dr. To Debenture Interest on 14% Convertible Debentures A/c (Being entry for interest due on 50,000 14% Convertible Debentures of Rs. 100 each for the period of 6 months from 1st October, 1988 to 31st March, 1989)		3,50,000	3,50,000
	Debenture Interest on 14% Convertible Debentures A/c Dr. To Income-tax A/c (Being entry for Income-tax @ 20% deducted from Debenture Interest payable for the period 1st October, 1988 to 31st March, 1989)		70,000	70,000

CASH BOOK (BANK COLUMN) Cr.

		Rs.
1988 Sept. 30	By Debenture Interest (On 50,000 14% Convertible Debentures of Rs. 100 each for 3 months from 1st July, 1988 to 30th September, 1988 *less* Income-tax, *i.e.*, Rs. 1,75,000—Rs. 35,000)	1,40,000
	By Income-tax (On Rs. 1,75,000 debenture interest @ 20%)	35,000
1989 Mar. 31	By Debenture Interest (On 50,000 14% Convertible Debentures of Rs. 100 each for 6 months from 1st October, 1988 to 31st March, 1989, *i.e.*, Rs. 3,50,000—Rs. 70,000)	2,80,000
	By Income-tax (On Rs. 3,50,000 debenture interest @ 20%)	70,000

PROFIT AND LOSS ACCOUNT OF EVERNEEDY CO. LTD.,

Dr. for the period ended on 31st March, 1989 Cr.

	Rs.		
To Debenture Interest on 14% Convertible Debentures (Rs. 1,75,000 + 3,50,000)	5,25,000		

Real burden of interest

The interest on debentures, as already observed, is paid on the nominal or face value of debentures and not on the issue price. The interest payable on a debenture of the face value of Rs. 100 would be the same whether it is issued for Rs. 100 (*i.e.*, at par) or Rs. 105 (*i.e.*, at a premium), or Rs. 95 (*i.e.*, at a discount). Thus the *real burden of interest* on the company would vary with the amount which is received on the issue of debentures. The following illustration will clarify the point.

Illustration 10. Find out the real burden of interest in terms of percentage on the three Companies in the following cases :

(1) AB Ltd. issued 5,000 14% Fully Convertible Debentures of Rs. 100 each at par.

(2) CD Ltd. issued 5,000 14% Partly Convertible Debentures of Rs. 100 each at a discount of 10%.

(3) EF Ltd., issued 5,000 14% Fully Secured Debentures of Rs. 100 each at a premium of Rs. 20.

Solution :

Company	Amount Received	Interest Payable on	Rate of Interest	Amount of Interest
		Rs.		Rs.
(1) AB Ltd.	5,00,000	5,00,000	14%	70,000
(2) CD Ltd.	4,50,000	5,00,000	14%	70,000
(3) EF Ltd.	6,00,000	5,00,000	14%	70,000

Effective rate of interet or real burden of interest in terms of percentage would be as follows :

$$\text{Rate of Interest} = \frac{\text{Amount of Interest Payable} \times 100}{\text{Amount Received}}$$

$$\text{AB Ltd.} = \frac{70{,}000 \times 100}{5{,}00{,}00} = 14\%$$

$$\text{CD Ltd.} = \frac{70{,}000 \times 100}{4{,}50{,}000} = 15{\cdot}55\%$$

$$\text{EF Ltd.} = \frac{70{,}000 \times 100}{6{,}00{,}000} = 11{\cdot}67\%$$

Thus whereas nominal burden of interest (14%) is same in case of all the companies, real burden of interet in terms of percentage rate of interest—

(*a*) is same (14%) in case of AB Ltd. which issues debentures at par ;

(*b*) becomes higher (15·55%) in case of CD Ltd. which issues debentures at a discount ; and

(*c*) becomes lower (11·67%) in case of EF Ltd. which issues debentures at a premium.

REDEMPTION OF DEBENTURES

'To redeem' means 'to pay back'. Debentures, as we have already seen, represent a loan taken by a company. The loan has got to be paid back. The terms on which the loan represented by debentures is to be paid back (*i.e.*, the method and date of payment) are endorsed on the back of the instrument of debentures.

The various modes of redemption of debentures may be as follows :

1. Redemption by a single payment after a fixed period by setting up a sinking fund to provide for the necessary cash to effect repayment.
2. Redemption by annual periodical drawings.
3. Redemption by purchase in the open market at current market prices.
4. Redemption by conversion.
5. Redemption by a combination of any of the above methods.

SOURCES OF REDEMPTION OF DEBENTURES

A company may adopt any one of the following courses in order to provide funds for the redemption of debentures :

1. **Fresh issue of shares and/or debentures.** The company may issue fresh shares and/or debentures for the purpose of redemption of debentures. The fresh issue makes available to the company the necessary funds for the purpose. If the company issues new debentures for the purpose, it simply means substitution of a new liability for the existing liability. This covers the case of redemption by conversion.

2. **Accumulated undistributed profits.** If debentures are not to be redeemed by a fresh issue of debentures or shares, the company sets aside a part of the profit by annual allocation to a sinking fund. In such a case, the company withholds a part of the profits every year from distribution to the shareholders, thus accumulating over years (*i.e.*, the term of the debentures) sufficient amount to redeem the debentures. The amount so appropriated out of profits may be used in the business itself or may be invested outside the business. At the time of redemption the investments are realised to make available the necessary funds for the purpose of redemption.

3. **Current resources.** If the company has enough current resources, it may redeem the debentures out of these current resources. The company may, for example, purchase its own debentures from the open market either for the purpose of investment or for redemption.

4. **Sale proceeds of assets.** If a company issues debentures for the purpose of raising resources to purchase some asset for a particular purpose (say, a specific machinery), it may, when the purpose is achieved, redeem the debentures out of the sale proceeds of that asset. Any deficit may be met out of current resources or current profits.

Entries for redemption

Before the various methods of redemption of debentures are discused, the entries for redemption may be given :

(1) *When debentures are redeemed at par* (say a debenture of Rs. 100 is redeemed at Rs. 100).

		Rs.	Rs.
Debentures A/c	Dr.	100	
To Debenture Redemption/ Debenture-holders A/c			100
(Being entry for redemption of ...... debentures of the nominal value of Rs. ...... at par)			

		Rs.	Rs.
Debenture Redemption/Debenture-holders A/c	Dr.	100	
To Bank A/c			100
(Being entry for payment on redemption of......debentures of the nominal value of Rs ......)			

The above two entries may be combined into one entry which is as follows :

		Rs.	Rs.
Debentures A/c	Dr.	100	
To Bank A/c			100
(Being entry for payment on redemption of...... debentures of the nominal value of Rs.......at par)			

(2) *When debentures are redeemed at a discount* (say a debenture of Rs. 100 is redeemed at Rs. 90).

		Rs.	Rs.
Debentures A/c	Dr.	100	
To Bank			90
To Profit on Redemption of Debentures A/c			10
(Being entry for payment on redemption of......debentures of the nominal value of Rs...... at a discount)			

(3) *When debentures are redeemed at a premium* (say a debenture of Rs. 100 is redeemed at Rs. 110).

		Rs.	Rs.
Debentures A/c	Dr.	100	
Premium on Redemption of Debentures A/c	Dr.	10	
To Bank A/c			110
(Being entry for payment on redemption of ......debentures of the nominal value of Rs...... at a premium)			

Illustration 11. What will be the journal entries for issue and redemption of 200 debentures of Rs. 100 each in the following cases ?

(*a*) Issued at Rs. 100 repayable at Rs. 100.

(*b*) Issued at Rs. 95 repayable at Rs. 100.

(*c*) Issued at Rs. 105 repayable at Rs. 100.

(*d*) Issued at Rs. 95 repayable at Rs. 105.

(*e*) Issued at Rs. 100 repayable at Rs. 105.

The debentures are redeemable after 5 years by a lump sum payment.

Solution :

Entries for issue of debentures

JOURNAL

			Rs.	Rs.
(*a*)	Bank A/c Dr. To Debentures A/c (Being entry on issue of 200 debentures of Rs. 100 each at Rs. 100 per debenture, repayable at par)		20,000	20,000
(*b*)	Bank A/c Dr. Discount on Issue of Debentures A/c Dr. To Debentures A/c (Being entry on issue of 200 debentures of Rs. 100 each at Rs. 95 per debenture, repayable at par)		19,000 1,000	20,000
(*c*)	Bank A/c Dr. To Debentures A/c To Premium on Issue of Debentures A/c (Being entry on issue of 200 debentures of Rs. 100 each at a premium of Rs. 5 per debenture, repayable at par)		21,000	20,000 1,000
(*d*)	Bank A/c Dr. Loss on Issue of Debentures A/c Dr. To Debentures A/c To Premium on Redemption of Debentures A/c (Being entry on issue of 200 debentures of Rs. 100 each at a discount of Rs. 5 per debenture, repayable at a premium of Rs. 5 per debenture)		19,000 2,000	20,000 1,000

			Rs.	Rs.
(e)	Bank A/c Dr.		20,000	
	Loss on Issue of Debentures A/c Dr.		1,000	
	To Debentures A/c			20,000
	To Premium on Redemption of Debentures A/c			1,000
	(Being entry on issue of 200 debentures of Rs. 100 each at par, repayable at a premium of Rs. 5 per debenture)			

Entries at the time of Redemption

JOURNAL

			Rs.	Rs.
(a)	Debentures A/c Dr.		20,000	
	To Bank A/c			20,000
	(Being entry on redemption of 200 debentures of Rs. 100 each at par)			
(b)	Debentures A/c Dr.		20,000	
	To Bank A/c			20,000
	(Being entry on redemption of 200 debentures of Rs. 100 each at par)			
(c)	Debentures A/c Dr.		20,000	
	To Bank A/c			20,000
	(Being entry on redemption of 200 debentures of Rs. 100 each at par)			
(d)	Debentures A/c Dr.		20,000	
	Premium on Redemption of Debentures A/c Dr.		1,000	
	To Bank A/c			21,000
	(Being entry on redemption of 200 debentures of Rs. 100 each at a premium of Rs. 5 per debenture)			
(e)	Debentures A/c Dr.		20,000	
	Premium on Redemption of Debentures A/c Dr.		1,000	
	To Debentures A/c			21,000
	(Being entry on redemption of 200 debentures of Rs. 100 each at a premium of Rs. 5 per debenture)			

Illustration 12. On 1st April, 1986 Loveall Ltd. issued 4,000 14% debentures of Rs. 250 each at a premium of Rs. 25 for the purchase of a building for its offices. The building cost Rs. 12,00,000. The debentures were redeemable at the option of the Company at any time after a period of 3

years. The Balance Sheet of the Company as on 31st March, 1989 was as follows :

Liabilities	Rs.	Assets		Rs.
			Rs.	
Share Capital	20,00,000	Building	12,00,000	
14% Debentures	10,00,000	*Less* Dep.	90,000	
Premium on Redemption				11,10,000
of Debentures	1,00,000	Other Fixed Assets		3,90,000
Profit and Loss A/c	5,00,000	Debtors		10,00,000
Creditors	4,00,000	Bank		15,00,000
	40,00,000			40,00,000

During the period of three years beginning 1st April, 1986 the Company found the interest obligation to be rather heavy. It, therefore, decided on 31st March, 1989 to dispose of the building and move to a rented premises. The building was sold for Rs. 15,00,000. Expenses in selling the building came to Rs. 30,000.

Pass Journal Entries and show the Balance Sheet of the Company after the Debentures are redeemed.

Solution :

JOURNAL

			Rs.	Rs.
1989 Mar. 31	Bank A/c Dr.		14,70,000	
	To Building A/c			14,70,000
	(Being entry for net amount received on sale of building for Rs. 15,00,000 *less* expenses Rs. 30,000)			
	Debentures A/c Dr.		10,00,000	
	Premium on Redemption of Debentures A/c Dr.		1,00,000	
	To Bank A/c			11,00,000
	(Being entry on amount paid on redemption of debentures of Rs. 10,00,000, premium on redemption being Rs. 1,00,000)			
	Building A/c Dr.		3,60,000	
	To Capital Reserve A/c			3,60,000
	(Being profit on sale of building for the redemption of debentures transferred to Capital Reserve A/c)			

BALANCE SHEET OF LOVEALL LTD. as on 1st April, 1989

Liabilities	Rs.	Assets	Rs.
Share Capital	20,00,000	Fixed Assets	3,90,000
Capital Reserve	3,60,000	Bank	18,70,000
Profit and Loss A/c	5,00,000	Debetors	10,00,000
Creditors	4,00,000		
	32,60,00		32,60,000

Illustration 13. The following in the Balance Sheet of Luckall Ltd. as on 31st March, 1989 :

Liabilities	Rs.	*Assets*	Rs.
Share Capital	50,00,000	Land and Building	30,00,000
General Reserve	5,00,000	Machinery	36,00,000
Profit and Loss Appropriation A/c	21,00,000	Debtors	8,00,000
12% Debentures	20,00,000	Bank	32,00,000
Creditors	10,00,000		
	1,06,00,000		1,06,00,000

On this date, the Company decided to redeem the Debentures out of profits accumulated over years for the purpose of redemption.

Pass the journal entry to carry out redemption and prepare the Balance Sheet of the Company after redemption.

Solution :

JOURNAL

			Rs.	Rs.
1989 Mar. 31	12% Debentures A/c Dr. To Bank A/c (Being entry on redemption of debentures of Rs. 20,00,000 out of accumulated profits)		20,00,000	20,00,000
	Profit and Loss Appropriation A/c Dr. To General Reserve A/c (Being entry for transfer of Rs. 20,00,000 from Profit and Loss Appropriation A/c to General Reserve A/c on redemption of debentures for Rs. 20,00,000 out of accumulated profits)		20,00,000	20,00,000

BALANCE SHEET OF LUCKALL LTD., as on...........

Liabilities	Rs.	*Assets*	Rs.
		Rs.	
Share Capital	50,00,000	Land and Building	30,00,000
General Reserve	25,00,000	Machinery	36,00,000
Profit and Loss Appropriation A/c	1,00,000	Debtors	8,00,000
Creditors	10,00,000	Bank (Rs. 32,00,000 – 20,00,000)	12,00,000
	86,00,000		86,00,000

VARIOUS METHODS OF REDEMPTION

The various methods of redemption of debentures are discussed below.

(1) REDEMPTION BY A SINGLE PAYMENT AFTER A FIXED PERIOD

In order to provide funds to redeem debentures by a single payment after a fixed period, a company usually creates, out of its profits, a fund known as Sinking Fund or Debenture Redemption Fund.

The mechanism of the building up of the Debenture Redemption Fund and the book-keeping entries necessary while it is being built up are similar to the entries considered in regard to the Sinking Fund for replacement of an asset (Refer to Chapter on Depreciation in Accounting II) *except* that—

(*i*) the annual allocation to the Debenture Redemption Fund is an *appropriation of profits* and *not an expense.* And as such it is debited annually to the Profit and Loss Appropriation Account.

(*ii*) after the redemption is carried out, the balance shown by the Debenture Redemption Fund represents profit and is transferred to the General Reserve.

The mechanism of the operation of the Debenture Redemption Fund is as follows :

At the end of every year, a certain sum of money is appropriated out of profit and invested outside the business at a given compound rate of interest. At the end of the term of debentures, the amount accumulates to the required figure. If the debentures are to be redeemed at a premium, provision is also made for the premium payable at the time of redemption.

The amount to be invested annually depends on—

1. The amount of debentures,
2. The term (period) of debentures, and
3. The rate of interest at which investments are made.

Journal entries. The following Journal entries will explain the mechanism of the operation of the Debenture Redemption Fund.

At the end of first year

(*a*) *For setting apart amount of annual instalment out of profits :*

Profit and Loss Appropriation A/c Dr.
 To Debenture Redemption Fund A/c

(Being entry for setting apart amount out of profit for creating Debenture Redemption Fund)

(*b*) *For investment* :

Debenture Redemption Fund Investment A/c Dr.
 To Bank A/c

(Being entry for investment of the amount appropriated for redemption of Debentures)

At the end of subsequent years

(*a*) *For receipt of interest :*

Bank A/c Dr.

To Interest on Debenture Redemption Fund Investment A/c

(Being entry for receipt of interest on Debenture Redemption Fund Investments)

(*b*) *For transfer of interest to Debenture Redemption Fund :*

Interest on Debenture Redemption Fund Investment A/c Dr.

To Debenture Redemption Fund A/c

(Being transfer of interest received on Debenture Redemption Fund Investments to Debentures Redemption Fund Account)

(*c*) *For setting apart amount of annual instalment out of profits :*

Profit and Loss Appropriation A/c Dr.

To Debenture Redemption Fund A/c

(Being entry for amount appropriated out of profits)

(*d*) *For investment :*

Debenture Redemption Fund Investment A/c Dr.

To Bank A/c

(Being entry for investment of amount appropriated plus interest received)

Note : The amount of this entry will be total of amounts of entries (*b*) and (*c*).

The above four entries are repeated every year till the investments are realised. In the last year when debentures are to be redeemed there is no entry for investment.

At the time of Redemption

(*a*) *When investments are realised :*

Bank A/c Dr.

To Debenture Redemption Fund Investment A/c

(Being amount realised on sale of Debenture Redemption Fund Investments)

Any profit or loss on sale of investments is transferred to Debenture Redemption Fund Account :

If there is a profit :

Debenture Redemption Fund Investmen A/c Dr.

To Debenture Redemption Fund A/c

(Being transfer of profit on sale of investments to Debenture Redemption Fund A/c)

If there is a loss :

Debenture Redemption Fund A/c Dr.

To Debenture Redemption Fund Investment A/c

(Being transfer of loss on sale of investments to Debenture Redemption Fund A/c)

(*b*) *When Debentures are paid off :*

Debentures A/c Dr.
To Bank A/c
(Being amount paid to debenture-holders on redemption)

(*c*) *For transferring balance in Debenture Redemption Fund Account to General Reserve :*

Debenture Redemption Fund A/c Dr.
To General Reserve A/c
(Being transfer of balance in Debenture Redemption Fund A/c to General Reserve)

Illustration 14. On 1st April 1986, a company issued 10,000 debentures of Rs. 100 each at par repayable at par on 31st March, 1989. A Sinking Fund was created to ensure that sufficient funds were available at the time of repayment. Interest yield on investments was 10%. Sinking Fund Tables show that Re. ·302115 invested annually for 3 years at 10% compound interest would amount to Re. 1.

On 31st March, 1989, the investments realised Rs. 6,30,000. On this date, Bank balance of the company was Rs. 4,80,500. The debentures were duly redeemed.

Give journal entries and show—

(*a*) Debenture Redemption Fund Account, and
(*b*) Debenture Redemption Fund Investment Account.

How would Debenture Redemption Fund and Debenture Redemption Fund Investment Accounts appear in the Balance Sheet over these years ? The accounting year of the Company ends on 31st March.

Solution :

JOURNAL

			Rs.	Rs.
1986 Apr. 1	Bank A/c Dr. To Debentures A/c (Being amount received on issue of debentures)		10,00,000	10,00,000
1987 Mar. 31	Profit and Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c (Being entry for setting apart amount out of profits for creating Debenture Redemption Fund)		3,02,115	3,02,115
	Debenture Redemption Fund Investment A/c Dr. To Bank A/c (Being entry for investment of amount appropriated for redemption of Debentures)		3,02,115	3,02,115

Date	Particulars	L.F.	Rs.	Rs.
1988 Mar. 31	Bank A/c Dr. To Interest on Debenture Redemption Fund Investment A/c (Being entry for receipt of interest on Debenture Redemption Fund Investments)		30,211	30,211
	Interest on Debenture Redemption Fund Investment A/c Dr. To Debenture Redemption Fund A/c (Being transfer of interest received on Debenture Redemption Fund Investments to Debenture Redemption Fund)		30,211	30,211
	Profit and Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c (Being entry for amount appropriated out of profits)		3,02,115	3,02,115
	Debenture Redemption Fund Investment A/c Dr. To Bank A/c (Being entry for investment of amount appropriated plus interest received)		3,32,326	3,32,326
	Bank A/c Dr. To Interest on Debenture Redemption Fund Investment A/c (Being entry for receipt of interest on Debenture Redemption Fund Investments)		63,444	63,444
	Interest on Debenture Redemption Fund Investment A/c Dr. To Debenture Redemption Fund A/c (Being entry for transfer of interest to Debenture Redemption Fund)		63,444	63,444
	Profit and Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c (Being entry for amount appropriated out of profits)		3,02,115	3,02,115

Date	Particulars	L.F.	Dr. Rs.	Cr. Rs.
1989 Mar. 31	Bank A/c Dr. To Debenture Redemption Fund Investment A/c (Being amount realised on sale of Debenture Redemption Fund Investments)		6,30,000	6,30,000
	Debenture Redemption Fund A/c Dr. To Debenture Redemption Fund Investment A/c (Being transfer of loss on sale of Investments to Debenture Redemption Fund)		4,441	4,441
	Debentures A/c Dr. To Bank A/c (Being amount paid to debenture-holders on redemption)		10,00,000	10,00,000
	Debenture Redemption Fund A/c Dr. To General Reserve A/c (Being transfer of balance in Debenture Redemption Fund to General Reserve)		9,95,559	9,95,559

LEDGER

Dr. DEBENTURE REDEMPTION FUND ACCOUNT Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1987 Mar. 31	To Balance c/d	3,02,115	1987 Mar. 31	By Profit and Loss Appropriation A/c	3,02,115
1988 Mar. 31	To Balance c/d	6,34,441	1987 Apr. 1	By Balance b/d	3,02,115
			1988 Mar. 31	By Interest on Debenture Redemption Fund Investment A/c	30,211
				By Profit and Loss Appropriation A/c	3,02,115
		6,34,441			6,34,441

Contd.

Contd.

1989		Rs.	1988		Rs.
Mar. 31	To Debenture Redemption Fund Investment A/c (Loss)	4,441	Apr. 1	By Balance b/d	6,34,441
	To General Reserve (Transfer)	9,95,559	1989 Mar. 31	By Interest on Debenture Redemption Fund Investment A/c	63,444
				By Profit and Loss Appropriation A/c	3,02,115
		10,00,000			10,00,000

Dr. DEBENTURE REDEMPTION FUND INVESTMENT ACCOUNT Cr.

1987		Rs.	1987		Rs.
Mar. 31	To Bank	3,02,115	Mar. 31	By Balance c/d	3,02,115
1987 Apr. 1	To Balance b/d	3,02,115	1988 Mar. 31	By Balance c/d	6,34,441
1988 Mar. 31	To Bank	3,32,326			
		6,34,441			6,34,441
1988 Apr. 1	To Balance b/d	6,34,441	1989 Mar. 31	By Bank (Amount realised)	6,30,000
				By Debenture Redemption Fund A/c (Transfer)	4,441
		6,34,441			6,34,441

BALANCE SHEET as on 31st March, 1987

	Rs.		Rs.
Debenture Redemption Fund	3,02,115	Debenture Redemption Fund Investments	3,02,115

BALANCE SHEET as on 31st March, 1988

	Rs.		Rs.
Debenture Redemption Fund	6,34,441	Debenture Redemption, Fund Investments	6,34,441

Working note :

Calculation of Interest on Debenture Redemption Fund Investments

	Rs.
Amount intvested at the end of 1st year	3,02,115
Interest earned at the end of 2nd year	30,112
Amount invested at the end of 2nd year	3,32,227
Total Investment	6,34,442
Interest earned at the end of 3rd year	63,444

Illustration 15. The following is the Balance Sheet of Navyug Limited on 31st March, 1989 before the profit for the year is appropriated in any manner :

BALANCE SHEET OF NAVYUG LIMITED as on 31st March, 1989

Liabilities	Rs.	*Assets*	Rs.
Share Capital	5,00,000	Fixed Assets	8,19,668
General Reserve	2,00,000	Debenture Redemption Fund Investments	2,79,155
Debenture Redemption Fund	2,79,155	Debtors	2,00,000
12% Debentures	4,00,000	Bank	4,30,000
Premium on Redemption of Debentures	40,000		
Creditors	1,00,000		
Profit and Loss Appropriation A/c	2,09,668		
	17,28,823		17,28,823

The yearly appropriation of profits for redemption of debentures is Rs. 1,32,930. Debenture Redemption Fund Investments yield an interest of 10% per annum. On 31st March, 1989 the Company decides to redeem the Debentures. The Debenture Redemption Fund Investments realise Rs. 3,00,000, in addition to interest.

Show Ledger Accounts and the Balance Sheet of the Company after the redemption is carried out.

Solution :

LEDGER

Dr. 12% DEBENTURES ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To 12% Debenture-holders A/c (Transfer)	4,00,000	Mar. 31	By Balance b/d	4,00,000
		4,00,000			4,00,000

Dr. PREMIUM ON REDEMPTION OF DEBENTURES ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To 12% Debenture-holders A/c (Transfer)	40,000	Mar. 31	By Balance b/d	40,000

Dr. 12% DEBENTURE-HOLDERS ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Bank	4,40,400	Mar. 31	By 12% Debentures A/c	4,00,000
				By Premium on Redemption of Debentures A/c	40,000
		4,40,400			4,40,400

Dr. DEBENTURE REDEMPTION FUND ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To General Reserve (transfer)	4,60,845	Mar. 31	By Balance b/d	2,79,155
				By Interest on Debenture Redemption Fund Investments	27,915
				By Profit & Loss Appropriation A/c	1,32,930
				By Debenture Redemption Fund Investment A/c (Profit)	20,845
		4,60,845			4,60,845

Dr. DEBENTURE REDEMPTION FUND INVESTMENT ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Balance b/d	2,79,155	Mar. 31	By Bank	3,00,000
	To Debenture Redemption Fund A/c (Transfer)	20,845			
		3,00,000			3,00,000

Dr. INTEREST ON DEBENTURE REDEMPTION FUND INVESTMENT A/C Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Debenture Redemption Fund A/c (Transfer)	27,915	Mar. 31	By Bank	27,915

Dr. BANK ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Balance b/d	4,30,000	Mar. 31	By Debentures A/c	4,40,000
	To Interest on Debenture Redemption Fund Investments	27,915		By Balance c/d	3,17,915
	To Debenture Redemption Fund Investment A/c	3,00,000			
		7,57,915			7,57,915

BALANCE SHEET OF NAVYUG LIMITED as on 31st March, 1989

Liabilities	Rs.	*Assets*	Rs.
Share Capital	5,00,000	Fixed Assets	8,19,668
General Reserve	6,60,845	Debtors	2,00,000
Creditors	1,00,000	Bank	3,17,915
Profit and Loss Appropriation A/c (Rs. 2,09,668 –Rs. 1,32,930)	76,738		
	13,37,583		13,37,583

Illustration 16. On 1st April, 1987 Navjot Limited issued 1,000 12% Debentures of Rs. 100 each at par repayable at a premium of 10% after three years. The Company created a Debenture Redemption Fund for the purpose. The investments were made in multiples of Rs. 100 at 12% per annum. According to Sinking Fund Table Re. ·29635 invested at the end of the year for 3 years at 12% per annum amounts to Re. 1. The investments at the end of the third year realise Rs. 69,000. Calculations are to be done to the nearest rupee. The debentures are redeemed at the end of third year.

Show Ledger Accounts for the three years.

Solution :

Dr. DEBENTURE REDEMPTION FUND ACCOUNT Cr.

		Rs.			Rs.
1988 Mar. 31	To Balance c/d	32,598	1988 Mar. 31	By Profit & Loss Appropriation A/c (·29635 × 1,10,000)	32,598
1989 Mar. 31	To Balance c/d	69,108	1988 Apr. 1	By Balance b/d	32,598
			1989 Mar. 31	By Interest on Debenture Redemption Fund Investments	3,912
				By Profit & Loss Appropriation A/c	32,598
		69,108			69,108
1990 Mar. 31	To Debenture Redemption Fund Investment A/c (loss)	100	1989 Apr. 1	By Balance b/d	69,108
	To General Reserve (transfer)	1,09,900		By Interest on Debenture Redemption Fund Investment	8,292
				By Profit & Loss Appropriation A/c	32,600
		1,10,000			1,10,000

Dr. **DEBENTURE REDEMPTION FUND INVESTMENT ACCOUNT** Cr.

		Rs.			Rs.
1988 Mar. 31	To Bank (nearest multiple of 100 of 29,635)	32,600	1988 Mar. 31	By Balance c/d	32,600
1988 Apr. 1	To Balance c/d	32,600	1989 Mar. 31	By Balance c/d	69,100
1989 Mar. 31	To Bank (nearest multiple of 100 of 3,912 + 32,598)	36,500			
		69,100			69,100
1989 Jan. 1	To Balance b/d	69,100	1990 Mar. 31	By Bank	69,000
				By Debenture Redemption Fund A/c (transfer)	100
		69,100			69,100

Dr. **DEBENTURES ACCOUNT**

		Rs.			Rs.
1988 Mar. 31	To Balance c/d	1,00,000	1987 Apr. 1	By Bank	1,00,000
1989 Mar. 31	To Balance c/d	1,00,000	1988 Apr. 1	By Balance b/d	1,00,000
1990 Mar. 31	To Debenture-holders A/c (Transfer)	1,00,000	1989 Apr. 1	By Balance b/d	1,00,000

Dr. **PREMIUM ON REDEMPTION OF DEBENTURES ACCOUNT** Cr.

		Rs.			Rs.
1988 Mar. 31	To Balance c/d	10,000	1987 Apr. 1	By Sundries	10,000
1989 Mar. 31	To Balance c/d	10,000	1988 Apr. 1	By Balance b/d	10,000
1990 Mar. 31	To Debenture-holders A/c (Transfer)	10,000	1989 Apr. 1	By Balance b/d	10,000

Dr. DEBENTURE-HOLDERS ACCOUNT Cr.

1990		Rs.	1990		Rs.
Mar. 31	To Bank	1,10,000	Mar. 31	By Sandries	1,00,000
				By Premium on Redemption of Debentures A/c	10,000
		1,10,000			1,10,000

Dr. INTEREST ON DEBENTURE REDEMPTION FUND INVESTMENT A/C Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Debenture Redemption Fund A/c (transfer)	3,552	Mar. 31	By Bank	3,552
1990			1990		
Mar. 31	To Debenture Redemption Fund A/c (transfer)	8,292	Mar. 31	By Bank	8,292

Illustration 17. The following figures appeared in the books of a limited company as on 1st April, 1988 :

	Rs.
12% Mortgage Debentures	1,00,000
Debenture Redemption Fund	81,500
The Fund was invested in the following securities :	
60,000 9% Government Loan 1990	53,500
32,000 10% Conversion Loan	28,000

The annual instalment added to Debenture Redemption Fund was Rs. 14,500.

On 31st March, 1989 investments were sold as under :

9% Government Loan at 90 per cent.

10% Conversion Loan at 95 per cent.

The debentures were duly redeemed. The Bank Balance on 31st March, 1989 before receipt of interest on Debenture Redemption Fund Investments and the sale proceeds was Rs. 49,150.

You are required to show the necessary Ledger Accounts for the year ending 31st March, 1989.

Solution :

Dr. 12% MORTGAGE DEBENTURES ACCOUNT Cr.

1989		Rs.	1988		Rs.
Mar. 31	To Bank (Amount paid)	1,00,000	Apr. 1	By Balance b/d	1,00,000

Dr. DEBENTURE REDEMPTION FUND ACCOUNT Cr.

1989		Rs.	1988		Rs.
Mar. 30	To General Reserve (Transfer)	1,07,500	Apr. 1	By Balance b/d	81,500
			1989 Mar. 30	By Interest on Debenture Redemption Fund Investments (On 60,000 at 9% 5,400 (On 32,000 at 10% 3,200)	8,600
				By Profit & Loss Appropriation A/c	14,500
				By Debenture Redemption Fund Investment A/c (Profit)	2,900
		1,07,500			1,07,500

Dr. DEBENTURE REDEMPTION FUND INVESTMENT ACCOUNT Cr.

1988		Rs.	1989		Rs.
Apr. 1	To Balance b/d (60,000 9% Government Loan 1990, 53,500 32,000 8% Conversion Loan 28,000)	81,500	Mar. 31	By Bank (Government Loan $\frac{60,000 \times 90}{100}$ = 54,000 Conversion Loan $\frac{32,000 \times 95}{100}$ = 30,400)	84,400
	To Debenture Redemption Fund A/c (Profit transferred)	2,900			
		84,400			84,400

Dr. BANK ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Balance b/d	49,150	Mar. 31	By 12% Mortgage Debentures A/c	1,00,000
	To Interest on Debenture Redemption Fund Investments	8,600		By Balance c/d	42,150

Contd.

Contd.

1989		Rs.			Rs.
Mar. 31	To Debenture Redemption Fund Investment A/c	84,400			
		1,42,150			1,42,150

Debenture Redemption Fund Insurance Policy. Rather than investing the amount appropriated out of profits for the purpose of building up Debenture Redemption Fund in securities, a company may take an Insurance Policy for the sum required to redeem the debentures. Debenture Redemption Fund Investments in case the amount is invested in outside securities may not realise the required amount due to fall in the value of Investments. There is no such risk when an Insurance Policy for a fixed amount is taken. The Journal Entries to record these transactions are as follows :

At the end of the first year

(*a*) *On payment of Insurance Premium* :

Debenture Redemption Fund Policy A/c Dr.
To Bank
(Being entry on payment of Insurance Premium on Debenture Redemption Fund Policy)

Generally, the Insurance Premium is paid at the commencement of the year and appropriation from profits is made at the end of the year.

(*b*) *For setting apart amount of annual instalment out of profits* :

Profit and Loss Appropriation A/c Dr.
To Debenture Redemption Fund A/c
(Being entry for setting apart amount out of profits for creating Debenture Redemption Fund)

At the end of the subsequent years

Since no periodical interest is received on the Debenture Redemption Fund Policy, there is no entry for receipt of interest as is the case when investments are made in securities. The accumulated interest (which is the difference between the amount of the policy and the total of the premiums paid) is generally taken into account when the policy amount is received. If desired, interest at a certain rate may be calculated on the amount paid up on the policy, and periodical adjustment of interest may be made.

The entries for setting apart of amount of annual instalment out of profit and payment of Insurance Premium are the same as at the end of first year.

At the time of Redemption

(*a*) *When amount is received from Insurance Company* :

Bank A/c Dr.
To Debenture Redemption Fund Policy A/c
To Debenture Redemption Fund A/c
(Being entry on receipt of amount on Debenture Redemption Fund Policy, the excess received being interest transferred to Debenture Redemption Fund A/c)

It may be noted that the amount received on Debenture Redemption Fund Policy will be more than the total of Insurance Premiums paid during the term of the Policy. The excess amount received represents accumulated interest and is transferred to Debenture Redemption Fund Account.

(*b*) *When debentures are paid off* :

Debentures A/c Dr.
To Bank A/c
(Being amount paid on redemption of debentures)

(*c*) *For transferring balance in Debenture Redemption Fund Account to General Reserve* :

Debenture Redemption Fund A/c Dr.
To General Reserve A/c
(Being transfer of balance in Debenture Redemption Fund A/c to General Reserve)

Illustration 18. On 1st April 1986 Wills Ltd. issued 1,000 12% Debentures of Rs. 100 each repayable at a premium of 5% by a single payment after four years. For the purpose of making available funds for redemption, the Company took out on 1st April, 1986 an Insurance Policy for four years for Rs. 1,05,000, the yearly premium being Rs. 24,000. On 31st March, 1990 the Company received the Policy amount and redeemed the Debentures.

Journalise the above transactions.

Solution :

JOURNAL

1986 Apr. 1	Bank A/c Dr. Loss on Issue of Debentures A/c To 12% Debentures A/c To Premium on Redemption of Debentures A/c (Being amount received on issue of 1,000 12% Debentures of Rs. 100 each issued at par, repayable at a premium of 5%)		Rs. 1,00,000 5,000	Rs. 1,00,000 5,000
1986 Apr. 1	Debenture Redemption Fund Policy A/c Dr. To Bank A/c (Being insurance premium paid on Debenture Redemption Insurance Policy)		24,000	24,000
1987 Mar. 31	Profit and Loss A/c Dr. To Loss on Issue of Debentures A/c (Being entry on transfer of 1/4th Loss on Issue of Debentures to Profit and Loss A/c)		1,250	1,250

Date	Particulars	L.F.	Rs.	Rs.
1987 Mar. 31	Profit and Loss Appropriation A/c Dr.		24,000	
	To Debenture Redemption Fund A/c			24,000
	(Being amount appropriated out of profits for redemption of debentures)			
1987 Apr. 1	Debenture Redemption Fund Policy A/c Dr.		24,000	
	To Bank A/c			24,000
	(Being insurance premium paid on Debenture Redemption Insurance Policy)			
1988 Mar. 31	Profit and Loss A/c Dr.		1,250	
	To Loss on Issue of Debentures A/c			1,250
	(Being entry on transfer of 1/4th Loss on Issue of Debentures to Profit and Loss A/c)			
	Profit and Loss Appropriation A/c Dr.		24,000	
	To Debenture Redemption Fund A/c			24,000
	(Being amount appropriated out of profits for redemption of debentures)			
1988 Apr. 1	Debenture Redemption Fund Policy A/c Dr.		24,000	
	To Bank A/c			24,000
	(Being insurance premium paid on Debenture Redemption Insurance Policy)			
1989 Mar. 31	Profit and Loss A/c Dr.		1,250	
	To Loss on Issue of Debentures A/c			1,250
	(Being entry on transfer of 1/4th Loss on Issue of Debentures to Profit and Loss A/c)			
31	Profit and Loss Appropriation A/c Dr.		24,000	
	To Debenture Redemption Fund A/c			24,000
	(Being amount appropriated out of profits for redemption of debentures)			

Date	Particulars	L.F.	Rs.	Rs.
1989 Apr. 1	Debenture Redemption Fund Policy A/c Dr. To Bank A/c (Being insurance premium paid on Debenture Redemption Insurance Policy)		24,000	24,000
1990 Mar. 31	Profit and Loss A/c Dr. To Loss on Issue of Debentures A/c (Being entry on transfer of 1/4th Loss on Issue of Debentures to Profit and Loss A/c)		1,250	1,250
1990 Mar. 31	Profit and Loss Appropriation A/c Dr. To Debenture Redemption Fund A/c (Being amount appropriated out of profits for redemption of debentures)		24,000	24,000
31	Bank A/c Dr. To Debenture Redemption Fund Policy A/c To Debenture Redemption Fund A/c (Being amount received on Debenture Redemption Fund Policy on maturity, the excess amount of Rs. 9,000 on account of interest transferred to Debenture Redemption Fund A/c)		1,05,000	96,000 9,000
	12% Debentures A/c Dr. Premium on Redemption of Debentures A/c Dr. To Bank A/c (Being amount paid on Redemption of 1,000 12% Debentures of Rs. 100 each, at a premium of 5%)		1,00,000 5,000	1,05,000
	Debenture Redemption Fund A/c Dr. To General Reserve A/c (Being entry on transfer of Debenture Redemption Fund A/c balance to General Reserve)		1,05,000	1,05,000

2. Redemption by Annual Drawings

In case of Redemption by Annual Drawings, a fixed number of debentures, depending on the term of issue of debentures, are redeemed every year. For example if the term of debentures is five years, every year one-fifth of the debentures are redeemed so that at the end of five years all the debentures will be redeemed. Now the question is which one-fifth of the debentures are to be redeemed every year.

Usually, it is given in the terms of issue of debentures as to which one-fifth of these debentures is to be redeemed every year. It may be that the debentures are redeemed in the chronological order, *i.e.,* in the serial order in which they were issued. If nothing is mentioned in the terms of issue of debentures, debentures are redeemed by draw of lots.

An important point to be noted in connection with redemption of debentures by annual drawings is the treatment of Discount or Loss on Issue of Debentures. This loss is written off over the term of debentures but the amount to be transferred to Profit and Loss Account every year is in the proportion of the amount outstanding in the Debentures Account at the end of every year before redemption.

The following illustration will clarify the point. Suppose a company issues 1,000 12% Debentures of Rs. 100 each at a discount of $7\frac{1}{2}$ % to be redeemed over five years by annual drawings. The loss on account of Discount on Issue of Debentures will be :

$$= 1{,}000 \times 100 \times \frac{7\frac{1}{2}}{100} = \text{Rs. } 7{,}500.$$

The amount outstanding in Debentures Account at the end of first, second, third, fourth and fifth years respectively will be as follows :

	Rs.
1st year	1,00,000
2nd year	80,000
3rd year	60,000
4th year	40,000
5th year	20,000

This is in the ratio of 5 : 4 : 3 : 2 : 1. The amount to be transferred to Profit and Loss Account on account of Discount on Issue of Debentures will be as follows :

		Rs.
1st year	$\frac{5}{15}$ of 7,500	= 2,500
2nd year	$\frac{4}{15}$ of 7,500	= 2,000
3rd year	$\frac{3}{15}$ of 7,500	= 1,500
4th year	$\frac{2}{15}$ of 7,500	= 1,000
5th year	$\frac{1}{15}$ of 7,500	= 500

Illustration 19. On 1st April, 1985, Raja Steels Ltd. issued 10,000 10% Debentures of Rs. 100 each at a discount of 6%. The term of Debentures was 5 years. One fifth of the Debentures were to be redeemed every year by draw of lots.

The redemption was duly carried out on due dates. Show the Debentures Account and Discount on Issue of Debentures Account for five years.

Solution :

Dr. 10% DEBENTURES ACCOUNT Cr.

		Rs.			Rs.
1986 Mar. 31	To Bank (1/5th of Debentures redeemed)	2,00,000	1985 Apr. 1	By Bank	9,40,000
	To Balance c/d	8,00,000		By Discount on Issue of Debentures A/c	60,000
		10,00,000			10,00,000
1987 Mar. 31	To Bank (1/5th of Debentures redeemed)	2,00,000	1986 Apr. 1	By Balance b/d	8,00,000
	To Balance c/d	6,00,000			
		8,00,000			8,00,000
1988 Mar. 31	To Bank (1/5th of Debentures redeemed)	2,00,000	1987 Apr. 1	By Balance b/d	6,00,000
	To Balance c/d	4,00,000			
		6,00,000			6,00,000
1989 Mar. 31	To Bank 1/5th of Debentures redeemed)	2,00,000	1988 Apr. 1	By Balance b/d	4,00,000
	To Balance c/d	2,00,000			
		4,00,000			4,00,000
1990 Mar. 31	To Bank (1/5th of Debentures redeemed)	2,00,000	1989 Apr. 1	By Balance b/d	2,00,000

Dr. **DISCOUNT ON ISSUE OF 10% DEBENTURES ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1985 Apr. 1	To Debentures	60,000	1986 Mar. 31	By Profit & Loss A/c (5/15th of Rs. 60,000)	20,000
				By Balance c/d	40,000
		60,000			60,000
1986 Apr. 1	To Balance b/d	40,000	1987 Mar. 31	By Profit & Loss A/c (4/15th of Rs. 60,000)	16,000
				By Balance c/d	24,000
		40,000			40,000
1987 Apr. 1	To Balance b/d	24,000	1988 Mar. 31	By Profit & Loss A/c (3/15th of Rs. 60,000)	12,000
				By Balance c/d	12,000
		24,000			24,000
1988 Apr. 1	To Balance b/d	12,000	1989 Mar. 31	By Profit & Loss A/c (2/15th of Rs. 60,000)	8,000
				By Balance c/d	4,000
		12,000			12,000
1989 Apr. 1	To Balance b/d	4,000	1990 Mar. 31	By Profit & Loss A/c (1/15th of Rs. 60,000)	4,000

Working note :

Statement showing Allocation of Discount

year	Amount of debentures outstanding	Proportion to be written off	Amount of discount to be written off	
	Rs.		Rs.	Rs.
1985	10,00,000	10/30	10/30 of 60,000 =	20,000
1986	8,00,000	8/30	8/30 of 60,000 =	16,000
1987	6,00,000	6/30	6/30 of 60,000 =	12,000
1988	4,00,000	4/30	4/30 of 60,000 =	8,000
1989	2,00,000	2/30	2/30 of 60,000 =	4,000
				60,000

Illustration 20. A company issued 12% debentures of the face value of Rs. 1,20,000 at a discount of 10% on 1st April, 1985. The debentures are repayable by annual drawings of Rs. 40,000 commencing from the end of the third year. How will you deal with Discount on Debentures ?

Show the Discount on Issue of Debentures Account in the Company's Ledger for the period of duration of debentures. Assume accounts are closed on 31st March. [*Adapted from Delhi SSCE 1983* (*Comptt.*)]

Solution :

Dr. DISCOUNT ON ISSUE OF 12% DEBENTURES ACCOUNT Cr.

		Rs.			Rs.
1985 Apr. 1	To 12% Debentures A/c	12,000	1986 Mar. 31	By Profit & Loss A/c (transfer of 12/48 of Rs. 12,000)	3,000
				By Balance c/d	9,000
		12,000			12,000
1986 Apr. 1	To Balance b/d	9,000	1987 Mar. 31	By Profit & Loss A/c (transfer of 12/48 of Rs. 12,000)	3,000
				By Balance c/d	6,000
		9,000			9,000
1987 Apr. 1	To Balance b/d	6,000	1988 Mar. 31	By Profit & Loss A/c (transfer of 12/48 of Rs. 12,000)	3,000
				By Balance c/d	3,000
		6,000			6,000
1988 Apr. 1	To Balance b/d	3,000	1989 Mar. 31	By Profit & Loss A/c (transfer of 8/48 of Rs. 12,000)	2,000
				By Balance c/d	1,000
		3,000			3,000
1989 Apr. 1	To Balance b/d	1,000	1990 Mar. 31	By Profit & Loss A/c (transfer of 4/48 of Rs. 12,000)	1,000

Working note :

Statement showing Allocation of Discount

year	Amount of debentures outstanding	Proportion to be written off	Amount of discount to be written off	
	Rs.		Rs.	Rs.
1985-86	1,20,000	12/48	12/48 of 12,000 =	3,000
1986-87	1,20,000	12/48	12/48 of 12,000 =	3,000
1987-88	1,20,000	12/48	12/48 of 12,000 =	3,000
1988-89	80,000	8/48	8/48 of 12,000 =	2,000
1989-90	40,000	4/48	4/48 of 12,000 =	1,000
				12,000

3. Redemption by Purchase in the Open Market

If a company has option to purchase its own debentures in the open market, it would exercise this option only when the prices prevailing in the market are less than the face value. The company may treat these debentures in any one of the following ways :

(1) It may treat these debentures as an investment and may dispose them of later.

(2) It may treat these debentures as an investment and cancel them afterwards.

(3) It may immediately cancel the debentures so bought.

(1) Own Debentures kept as Investment.

If a company has surplus funds, it may rather than investing the amount in outside securities buy its own debentures as an investment. In such a case, the company will debit Own Debentures Account and credit Bank Account at the time of purchase of own debentures. Own Debentures are shown under the heading Investments on the assets side of Balance Sheet.

Illustration 21. Some time ago, A Ltd. issued 1,000 12% Debentures of Rs. 100 each fully paid. On 1st April, 1989, it purchased 100 of its own debentures @ Rs. 99 per debenture as an investment. Interest is paid half-yearly on 30th September and 31st March.

Pass Journal Entries and show how debentures will appear in the Balance Sheet on 1st April, 1989.

Solution :

JOURNAL

			Rs.	Rs.
1989 Apr. 1	Own Debentures Account A/c Dr.		9,900	
	To Bank A/c			9,900
	(Being entry on purchase of 100 12% Own Debentures @ Rs. 99 per debenture)			

BALANCE SHEET as on 1st April, 1989

Liabilities	Rs.	Assets	Rs.
Secured Loans : 12% 1,000 Debentures of Rs. 100 each, fully paid	1,00,000	Investments : Own Debentures (Face value Rs. 10,000)	9,900

(2) Cancellation of Own Debentures kept as investment.

A company which purchases its own debentures may either resell them (if the purchase is for investment) or continue to hold them. If the own debentures are afterwards cancelled, the Journal Entries are as follows :

(*i*) *If own debentures were purchased at less than the nominal value of debentures* (say a debenture of Rs. 100 purchased for Rs. 95)

		Rs.	Rs.
Debentures A/c	Dr.	100	
To Own Debentures A/c			95
To Profit on Redemption of Own Debentures A/c			5
(Being entry on cancellation of own debentures kept as investment, the difference, *i.e.*, profit, transferred to Profit on Redemption of Own Debentures A/c)			
Profit on Redemption of Own Debentures A/c	Dr.		
To Capital Reserve A/c			
(Being entry on transfer of profit on Redemption of Own Debentures to Capital Reserve)			

Capital Reserve appears on the liabilities side of the Balance Sheet under the heading 'Reserves and Surplus'.

(*ii*) *If own own debentures were purchased at more than nominal value* (say a debenture of Rs. 100 purchased for Rs. 105)

		Rs.	Rs.
Debentures A/c	Dr.	100	
Loss on Redemption of Own Debentures A/c	Dr.	5	
To Own Debentures A/c			105
(Being entry on Cancellation of Own Debentures kept as investment, the balance being Loss on Redemption or Cancellation of Own Debentures)			

It there is Capital Reserve in the books of the company, Loss on Redemption of Own Debentures will be set off against the Capital Reserve by passing following entry :

Capital Reserve A/c	Dr.	5	
To Loss on Redemption of Own Debentures A/c			5
(Being entry for transfer of Loss on Redemption of Own Debentures to Capital Reserve)			

If there is no capital reserve balance lying with the company, this loss is shown on the assets side of the Balance Sheet under the heading 'Miscellaneous Expenditure (to the extent not written off)'.

Illustration 22. Continuing with Illustration 21 if Own Debentures are subsequently cancelled on 1st October, 1989, the entries will be as follows :

1989				
Oct. 1	12% Debentures A/c	Dr.	10,000	
	To Own Debentures A/c			9,900
	To Profit on Redemption or Cancellation of Own Debentures A/c			100
	(Being entry on the cancellation of Own Debentures purchased for Rs. 9,900, the difference Rs. 100 profit transferred to Profit on Redemption of Own Debentures A/c)			
	Profit on Redemption or Cancellation of Own Debentures A/c	Dr.	100	
	To Capital Reserve A/c			100
	(Being entry on transfer of Profit on Redemption of Own Debentures A/c to Capital Reserve A/c)			

After cancellation of own debentures, 12% Debentures and Capital Reserve will appear in Balance Sheet as follows :

BALANCE SHEET as on 1st October, 1989

Liabilities	Rs.	*Assets*	Rs.
Secured Loans :			
12% Debentures	90,000		
Reserves and Surplus :			
Capital Reserve	100		

(3) Immediate Cancellation of Debentures.

Quite often, companies purchase their own debentures for redemption in the open market when they are quoted below their paid up value. If these debentures are immediately cancelled, the entry is :

(*i*) *Immediate redemption at par* :

Debentures A/c	Dr.	
To Bank A/c		
(Being entry on purchase of......... debentures at par for Rs.........for immediate cancellation or redemption)		

(*ii*) *Immediate redemption at a profit* :

Debentures A/c	Dr.	
To Bank A/c		
To Profit on Redemption of Debentures A/c		
(Being entry on purchase of ....debentures at Rs......per debenture, the difference being Profit on Redemption of Debentures)		

Profit on redemption of debentures will be transferred to Capital Reserve Account.

(*iii*) *Immediate redemption at a loss* :

Debentures A/c	Dr.	
Loss on Redemption of Debentures A/c	Dr.	
To Bank A/c		
(Being entry on purchase of.........debentures, at Rs.........per debenture, difference being Loss on Redemption of Debentures)		

Continuing with Illustration 21 if 100 debentures are purchased for immediate cancellation on 1st April, 1989, the following entries will be passed :

1989			Rs.	Rs.
Apr.1	12% Debentures A/c	Dr.	10,000	
	To Bank A/c			9,900
	To Profit on Redemption of Debentures A/c			100
	(Being entry on purchase of 100 debentures of the face value of Rs. 10,000 for Rs. 9,900, difference being Profit on Redmption of Debentures)			
	Profit on Redemption of Debentures A/c	Dr.	100	
	To Capital Reserve A/c			100
	(Being entry for transfer of Profit on Redemption of Debentures to Capital Reserve A/c)			

The Debentures and Capital Reserve will appear in Balance Sheet as follows :

BALANCE SHEET as at 1st April, 1989

Liabilities	Rs.	*Assets*	Rs.
Secured Loans :			
12% Debentures	90,000		
Reserves and Surplus :			
Capital Reserve	100		

Illustration 23. On 1st April, 1987 Easygo Limited issued 10,000 14% Debentures of Rs. 100 each. The debentures are redeemable by purchase in the open market. On 31st March, 1989 the Company purchases 1,500 debentures for cancellation from the open market at the following prices :

500 debentures at Rs. 96 plus 1% brokerage.

500 debentures at Rs. 97 plus 1·6% brokerage.

500 debentures at Rs. 95 plus 2% brokerage.

Show the Ledger Accounts of the Company for the year 1988-89. Ignore interest on debentures.

Solution :

Dr. 14% DEBENTURES ACCOUNT Cr.

1989		Rs.	1988		Rs.
Mar. 31	To Bank [Amount paid on purchase (500 × 96) + (500 × 97) + (500 × 95)]	1,44,000	Apr. 1	By Balance b/d	10,00,000
	To Profit on Redemption of Debentures A/c	6,000			
	To Balance c/d	8,50,000			
		10,00,000			10,00,000

Dr. PROFIT ON REDEMPTION OF DEBENTURES ACCOUNT Cr.

1989		Rs.	1989		Rs.
Mar. 31	To Bank (Brokerage Rs. $\frac{500 \times 96 \times 1}{100}$ 480; $\frac{500 \times 97 \times 1.6}{100}$ 776; $\frac{500 \times 95 \times 2}{100}$ 950)	2,206	Mar. 31	By 14% Debentures A/c	6,000
	To Capital Reserve (transfer)	3,794			
		6,000			6,000

Illustration 24. On 1st April, 1988 Parker Limited issued 10,000 14% Debentures of Rs. 100 each. The Company could redeem one-tenth of Debentures every year, beginning from 31st March, 1989, either by annual drawings or by purchase in the open market.

On 31st March, 1989, the Company purchased 1,000 Debentures in the open market as follows :

200 Debentures at Rs. 95
500 Debentures at Rs. 96
300 Debentures at Rs. 98.

A brokerage of 1·5 per cent was payable on the purchase price. The Debentures, which were redeemed out of profit, were cancelled immediately after purchase.

Show the Ledger Accounts in the Company's books. Ignore interest on debentures.

Solution :

Dr. 14% DEBENTURES ACCOUNT Cr.

		Rs.			Rs.
1989 Mar. 31	To Bank A/c (1/10th Debentures redeemed)	96,400	1988 Apr. 1	By Bank	10,00,000
	To Profit on Redemption of Debentures A/c	3,600			
	To Balance c/d	9,00,000			
		10,00,000			10,00,000

Dr. CAPITAL RESERVE ACCOUNT Cr.

		Rs.			Rs.
1989 Mar. 31	To Balance c/d	1,00,000	1989 Mar. 31	By Profit on Redemption of Debentures A/c (profit)	2,154
				By Profit & Loss Appropriation A/c	97,846
		1,00,000			1,00,000

Dr. PROFIT ON REDEMPTION OF DEBENTURES ACCOUNT Cr.

		Rs.			Rs.
1985 Mar. 31	To Bank A/c (Brokerage)	1,446	1985 Mar. 31	By 14% Debentures A/c	3,600
	To Capital Reserve (transfer)	2,154			
		3,600			3,600

Working notes :

(1) Profit on purchase of Debentures

On 200 Debentures	200 × (Rs. 100 – Rs.95)	= Rs. 1,000
On 500 Debentures	500 × (Rs. 100 – Rs.96)	= Rs. 2,000
On 300 Debentures	300 × (Rs. 100 – Rs.98)	= Rs. 600
		Rs. 3,600

(2) Amount realised on sale of Debentures (200 × Rs. 95) + (500 × Rs. 96) + (300 × Rs. 98) = Rs. 96,400.

(2) Brokerage = Rs. 96,400 $\times \frac{3}{2} \times \frac{1}{100}$ = Rs. 1,446.

Illustration 25. Ceema Ltd. has a balance of Rs. 2,00,000 in its 12% Debentures Account. It pays interest on 30th September and 31st March every year. It is authorised by its Articles of Association to "keep its own debentures as investment and to cancel them afterwareds or to purchase them for immediate cancellation". It purchased

(*i*) 100 own debentures @ Rs. 95 per debenture for investment purposes on 30th September, 1989 ;

(*ii*) 200 own debentures for immediate cancellation @ Rs. 90 per debenture on 31st March, 1990.

Pass the necessary journal entries relating to redemption of debentures and show how these items will appear in the Balance Sheet (Ignore Debenture Interest).

Solution :

JOURNAL

			Rs.	Rs.
1989 Sep. 30	Own Debentures A/c Dr.		9,500	
	To Bank A/c			9,500
	(Being entry on purchase of 100 Own Debentures for Rs. 9,500)			
1990 Mar. 31	12% Debentures A/c Dr.		20,000	
	To Bank A/c			18,000
	To Profit on Redemption of Debentures A/c			2,000
	(Being entry on purchase of 200 debentures of the face value of Rs. 20,000 for Rs. 18,000 for redemption)			
	Profit on Redemption of Debentures A/c Dr.		2,000	
	To Capital Reserve A/c			2,000
	(Being entry for transfer of profit on Redemption of 200 Debentures to Capital Reserve A/c)			

BALANCE SHEET OF CEEMA LTD., as at 31st March, 1990

Liabilities	Rs.	*Assets*	Rs.
Secured Loans :		Investments :	
12% Debentures	1,80,000	Own Debentures	9,500
Reserves and Surplus :		(Face value Rs. 10,000)	
Capital Reserve	2,000		

Interest on Debentures purchased. In the previous Illustrations relating to purchase of debentures by a company in the open market, interest on debentures was ignored. The question of interest arises when the debentures are purchased in the mid period of interest on debentures. The following illustration will make the point clear.

X Ltd. issues 5,000 12% debentures of Rs. 100 each on 1st April, 1987. The debentures are redeemable by annual drawings over five-years or purchase in the open market any time. Interest is payable half-yearly on 30th September and 31st March.

Let us say the Company purchases 200 debentures from Ram in the open market on 1st June, 1989. The interest on debentures for two months (April and May) has already accrued. But the next interest would be payable on these debentures on 30th September, 1989. The interest for six months works out to be Rs. 1,200. Strictly speaking interest for two months (*i.e.*, for April and May, 1989) should go to Ram. But the companies never apportion interest between two holders (in this case, Ram is holder for two months, and the Company is holder for four months) at the time of payment. In this case either Ram will get interest for six months (both for his period of two months and for the Company's holding period of four months) or the Company will retain interest for six months (for two months of Ram's holding period and four months of its own holding period). If Ram will get interest for the entire period of six months, the price is said to be *ex-interest* and if the Company will retain interest for the entire period of six months, the price is said to be *cum-interest.*

Let us say the Company purchases 200 debentures of Ram in the open market at Rs. 95 *ex-interest.* This means the next payment of interest for six months (two months of Ram's holding period and four months of Company's holding period) will go to Ram. Ram is thus getting interest for four months even after having sold the debentures which means the price of Rs. 95 includes interest for four months. Now if the price that the company pays to Ram is Rs. 98 *cum-interest*, the Company will get next interest payable on 30th September, *i.e.*, the Company will get interest for six months (two months' of Ram's holding period and four months' of its own holding period).

It is therefore important that *interest part* in the price paid for debentures is separated from the *cost part* of debentures. The former is a *revenue item*, the latter is a *capital item.*

To sum up :

If the price paid is *cum-interest*, the Company (*i.e.*, purchaser) is making extra payment on account of interest surrendered by Ram for two months.

If the price is *ex-interest*, the Company is making less payment on account of interest surrendered by it to Ram for four months.

The following Illustruation will make the point clear.

Illustration 26. Neptune Ltd. purchased from open market 1,000 12% Debentures of Rs. 100 each at Rs. 97 *cum-interest* on 1st November, 1989. It further purchased 1,000 12% Debentures on 1st January, 1990 at

Rs. 96 *ex-interest.* The Company closes its books on 31st March, and interest on debentures is payable half-yearly on 1st April and 30th September every year.

Pass Journal Entries if the Company purchases these debentures as an investment.

Solution :

JOURNAL

			Rs.	Rs.
1989 Nov. 1	Own Debentures A/c Dr. Interest on Own Debebentures A/c Dr. To Bank A/c (Being purchase of 1,000 12% Debentures at Rs. 97 *cum-interest,* Rs. 95,000 being cost part and Rs. 2,000 interest part (on Rs. 1,00,000 @ 12% p.a. for 2 months, *i.e.,* September and October, 1989)		95,000 2,000	 97,000
1990 Jan. 1	Own Debentures A/c Dr. To Bank A/c To Interest on Own Debentures A/c [Being purchase of 1,000 12% Debentures at Rs. 96 *ex-interest,* Rs. 99,000 being cost part and Rs. 3,000 interest part (on Rs. 1,00,000 @ 12% p.a. for 3 months, *i.e.,* January, February and March, 1989)]		99,000	 96,000 3,000

When Own Debentures are redeemed by cancellation, the following entries are passed :

If redeemed at a profit :

Debentures A/c Dr.
To Own Debentures A/c
To Profit on Redemption of Debentures A/c
(Being entry for cancellation of Own Debentures for redemption, the difference being profit)

If redeemed at a loss :

Debentures A/c Dr.
Loss on Redemption of Debentures A/c Dr.
To Own Debentures A/c
(Being entry for cancellation of Own Debenbtures for redemption, the difference being loss)

Illustration 27. On 1st April, 1986 Venus Ltd. issued 10,000 12% Debentures of Rs. 100 each, redeemable on 31st March, 1990. Interest is payable on 30th September and 31st March. The company has the option to redeem these debentures by purchase in the open market or by drawings.

The Company purchased debentures for redemption as follows :

(1) 2,000 Debentures at Rs. 100, *cum-interest*, on 1st November, 1989.

(2) 3,000 Debentures at Rs. 95, *ex-interest*, on 1st January, 1990.

(3) 4,000 Debentures at Rs. 96, *ex-interest*, on 31st March, 1990.

The company had sufficient cash to redeem the remaining Debentures on 31st March, 1990. The redemption of all the debentures was duly carried out on 31st March, 1990.

Journalise the transactions relating to redemption and interest on Debentures assuming that Income-tax is deducted on debenture interest at a flat rate of 20 per cent.

Solution :

JOURNAL

			Rs.	Rs.
1989 Nov. 1	Own Debentures (Lot 1) A/c Dr. Interest on Own Debentures A/c Dr. To Bank (Being purchase of 2,000 Own Debentures at Rs. 100 per debenture, *cum-interest*)		1,98,000 2,000	 2,00,000
1990 Jan. 1	Own Debentures (Lot 2)A/c Dr. To Interest on Own Debentures A/c To Bank A/c (Being purchase of 3,000 Own Debentures at Rs. 95 per debenture, *ex-interest*)		2,94,000	 9,000 2,85,000
Mar. 31	Interest on Debentures A/c Dr. To Interest on Own Debentures A/c To Bank A/c To Income-tax Payable A/c (Being entry on payment of Debenture Interest on 8,000 Debentures to outsiders, on 2,000 debentures purchased *cum-interest* to ourselves, after deducting Income-tax @ 20%)		60,000	 9,600 38,400 12,000
	12% Debentures A/c Dr. To Bank To Profit on Redemption of Debentures A/c (Being entry on purchase of 4,000 Debebtures at Rs. 96 per debenture, *ex-interest*, for the purpose of redemption)		4,00,000	 3,84,000 16,000
	12% Debentures A/c Dr. To Bank A/c (Being entry on redemption of remaining 1,000 Debentures by drawings at Rs. 100 per debenture)		1,00,000	 1,00,000

1990			Rs.	Rs.
Mar. 31	12% Debentures A/c Dr.		5,00,000	
	To Own Debentures (Lot 1) A/c			1,98,000
	To Own Debentures (Lot 2) A/c			2,94,000
	To Profit on Redemption of Debentures A/c			8,000
	(Being entry on cancellation of Own Debebtures Lot 1 for Rs. 1,98,000, Lot 2 for Rs. 2,94,000, the difference being profit)			
	Income-tax Payable A/c Dr.		12,000	
	To Bank A/c			12,000
	(Being entry on deposit of Income-tax in Central Revenul A/c)			

(4) Redemption by Conversion

A company may sometimes redeem its debentures by converting them either into fresh debentures carrying a slightly higher rate of interest or sometimes the company may pay a part of the amount in cash and issue for the balance partly shares and partly debentures. When debentures are redeemed in this manner, Debentures Account is debited and whatever is issued in exchange is credited.

TEST QUESTIONS

1. What is a debenture ? What are the different kinds of debentures ?

2. Distinguish between
   (*a*) A share and a debenture. *(Delhi SSCE, 1982)*
   (*b*) Equity Shares and Debentures.
   (All India SSCE, 1989 ; Delhi SSCE, 1986)

3. What is a debenture ? Describe the various methods of redemption of debentures. Give illustrations. *(All India SSCE, 1981)*

4. Describe in brief the debenture redemption fund method of redemption of debentures. Take imaginary figures to illustrate your answer. *(All India SSCE, 1984)*

5. Describe, giving suitable example, the sinking fund method of providing for redemption of debentures. *(All India SSCE, 1987)*

6. Enumerate various methods of redemption of debentures. Give suitable illustrations in support of your answer. *(Delhi SSCE, 1985,1980)*

7. Explain the various ways for redemption of debentures. *(Delhi SSCE, 1982)*

8. What is the treatment given to Debenture Redemption Fund after
   (*i*) all the debentures are redeemed, and
   (*ii*) a certain proportion of debentures only is redeemed. *(Delhi SSCE, 1989)*

9. (*a*) What entries are passed—

(*i*) when debentures are purchased in the open market.

(*ii*) when debentures are redeemed by annual drawings.

(*b*) Show Discount on Issue of Debentures Account with imaginary figures when debentures are to be redeemed over a period of five years by annual drawings.

10. Explain the meaning of 'debentures issued as collateral securities' by a company. Show its treatment in the Balance Sheet.

(*All India SSCE, 1985*)

11. How would you deal with the following :

(*i*) Discount on issue of debentures.

(*ii*) Premium on redemption of debentures. (*Delhi SSCE, 1984*)

(*iii*) Loss on issue of debentures.

12. Attempt the following :

(*i*) How do you treat premium on redemption of debentures ?

(*All India SSCE, 1986*)

(*ii*) What would you do to the balance of Debenture Redemption Fund Account, after all the debentures have been redeemed ? Give reasons for your answer.

(*All India SSCE, 1986*)

PRACTICAL EXERCISES—I

1. XYZ Company Limited issued 10,000 10% debentures of Rs. 100 each at a premium of Rs. 5, payable as follows :

On Application	Rs. 40 (including Premium)
On Allotment	Rs. 65

All the debentures were subscribed for and the money was duly received.

Pass necessary journal entries to record the above issue of debentures.

(*Delhi SSCE 1982*)

2. (*a*) West Bengal Trading Co., Ltd., issued Rs. 2,00,000 wortn of 12% Debentures at par repayable after four years at a premium of 10%. Assuming the debentures to have been taken up by the public, show the necessary Journal entries.

(*b*) Journalise the following :

(*i*) A debenture issued at Rs. 97 repayable at Rs. 100.

(*ii*) A debenture issued at Rs. 95 repayable at Rs. 105.

(*All India SSCE, 1979*)

3. Journalise the following :

(*i*) A debenture issued at Rs. 95, repayable at Rs. 100.

(*ii*) A debenture issued at Rs. 95, repayable at Rs. 105.

(*iii*) A debenture issued at Rs. 100, repayable at Rs. 105.

The face value of debenture in each of the above cases is Rs. 100.

(*Delhi SSCE, 1981*)

4. What journal entries will be made in the following cases ?

(*i*) A company issued Rs. 40,000, 12% Debentures at a discount of 10% redeemable at par ;

(*ii*) A company issued Rs. 40,000, 12% Debentures at a premium of 5% redeemable at par ;

(*iii*) A company issued Rs. 40,000, 12% Debentures at par redeemable at 10% premium ; and

(*iv*) A company issued Rs. 40,000, 12% Debentures at a discount of 5% and redeemable at 5% premium. (*All India SSCE, 1988*)

5. A limited company bought a Building for Rs. 9,00,000 and the consideration was paid by the issuing of debentures at a discount of 10%.

Give Journal entries. (*All India SSCE 1981*)

6. Sultan Limited issued 1,000 12% Debentures of Rs. 100 each, redeemable after five years by a single payment.

Pass Journal Entries both at the time of issue and at the time of redemption of debentures in the following cases :

(1) Issued at Rs. 100 repayable at Rs. 100.
(2) Issued at Rs. 100 repayable at Rs. 110.
(3) Issued at Rs. 110 repayable at Rs. 100.
(4) Issued at Rs. 90 repayable at Rs. 100.
(5) Issued at Rs. 90 repayable at Rs. 110.

7. On April 1, 1988, Sports Ltd. issued 10,000 12 per cent Debentures of Rs. 100 each at 95 per cent, repayable on March 31, 1998 at par. Rs. 50 per debenture was payable on application and the balance on allotment. Interest was payable on the full nominal amount as from April, 1, 1988.

Applications were received for 15,000 debentures. All allotments were made proportionately, over-subscription being applied to the balance due on allotment, which took place on May 31, 1988. All sums due on allotment were received by June 30, 1988. Assuming that the discount is to be written off evenly over the whole period, you are required to draft journal entries to record :

(*a*) the issue of debentures, and

(*b*) the charge to the Profit and Loss Account for the year, ended March 31, 1989.

[(*a*) Rs. 2,50,000 will be adjusted towards Debentures Allotment Account. (*b*) Rs. 5,000].

8. How will you record the following issue of debentures ?

1,000 6% Debentures of Rs. 100 each—

(*i*) issued at Rs. 100 repayable at Rs. 100.
(*ii*) issued at Rs. 90 repayable at Rs. 100.
(*iii*) issued at Rs. 110 repayable at Rs. 100.
(*iv*) issued at Rs. 100 repayable at Rs. 110.
(*v*) issued at Rs. 90 repayable at Rs. 110.

9. ABC Company Limited issues 500 15% non-convertible debentures of Rs. 1,000 each. Give journal entries in each of the following cases both at the time of issue and redemption :

(1) The debentures are issued at par and are redeemable at par.

(2) The debentures are issued at par and are redeemable at a premium of 5%.

(3) The debentures are issued at a discount of 5% and redeemable at a premium of 5%.

(4) The debentures are issued at a discount of 5% but are redeemable at par.

(5) The debenture are issued at a premium of 5% and are redeemable at par. *(Adapted from Delhi SSCE, 1986)*

10. On 1st April, 1985, Rama Ltd. issued 5,000 14% Debentures of Rs. 100 each, repayable at par on 31st March, 1990. The Company creates a Sinking Fund to ensure that sufficient funds are available at the time of redemption of these Debentures. According to Sinking Fund Table Re. ·180975 invested annually at 5% compound interest amounts to Re. 1.

You are required to prepare for five years :

(*a*) Sinking Fund Account, and

(*b*) Sinking Fund Investment Account.

(Interest Rs. 4,524·37; Rs. 9,274·97; Rs. 14,263·08; Rs. 19,500·61).

11. On 1st April, 1986, Prosperous Ltd. issued 25,000 14% Debentures of Rs. 100 each at a discount of 5 per cent, repayable at the end of four years at a premium of 10%. As per the terms of the issue, the company is required to maintain a Sinking Fund. The annual Sinking Fund contribution is Rs. 6,38,033. This amount accumulates at 5% compound interest. The Sinking Fund Investments at the end of four years realise Rs. 20,00,000.

Pass the Journal entries and Prepare Ledger Accounts for four years.

(Interest Rs. 31,902, Rs. 65,398 and Rs. 1,00,570. Loss on sale of Investments Rs. 11,399).

12. To redeem Rs. 5,00,000 Debentures, a Debenture Redemption Policy is taken by AB Ltd. with a premium of Rs. 90,000 per annum for 5 years.

Show entries : (*a*) from year to year, and also (*b*) at the time of redemption.

13. The Debenture Redemption Fund of Export Industries Limited stood at Rs. 16,00,000 represented by Rs. 20,00,000 (nominal) investments. The debentures stood in the books at Rs. 50,00,000 and the company sold Rs. 12,00,000 (nominal) investments at Rs. 84% for the purpose of redeeming Rs. 10,00,000 debentures at a premium of 1%.

You are required to show the Ledger Accounts to record these transactions. *(Adapted from All India SSCE Comptt.,1982)*

(Profit on sale of Investments Rs. 48,000 which is transferred to Debenture Redemption Fund. Transfer Rs. 10,00,000 from Debenture Redemption Fund to General Reserve. Balance : Debenture Redemption Fund Rs. 5,38,000 ; Debenture Redemption Fund Investments Rs. 6,40,000).

14. On 1st April, 1987 Triplex Limited issued 40,000 12% debentures of Rs. 100 each redeemable at the option of the company by drawings at par or by purchase in the open market. On 31st March, 1989 the Company decided to redeem 8,000 debentures. It purchased 6,000 debentures from the open market at a price of Rs. 95 and drew the remaining 2,000 debentures for redemption. It incurred Rs. 1,500 expenses on purchase of debentures.

Pass the Journal Entries and prepare the necessary Ledger Accounts.

(Profit on redemption Rs. 28,500).

15. On 1st April, 1987, a company made an issue of 1,000 15% Debentures of Rs. 1,000 each at Rs. 960 per debenture. The terms of issue provided for the redemption of 200 debentures every year commencing from 1st April, 1988 either by purchase or by drawings at par at the company's option. Rs. 10,000 was also written off the Debentures Discount Account in each of the years 1987-88 and 1988-89.

During the year ending 31st March, 1989, the company purchased for cancellation Debentures of the face value of Rs. 8,000 at Rs. 960 per debenture and of Rs. 12,000 at Rs. 900 per debenture.

Journalise the above transactions and show how the profit on redemption would be treated. *(Adapted from Delhi SSCE, 1979)*

[Transfer profit on redemption (Rs. 320 + Rs. 1,200) to General Reserve].

16. Green Ltd. issued 50,000 14% Debentures of Rs. 100 each at a discount of 5% repayable after five years at a premium of 5%.

You are required to show :

(*i*) Journal Entries both at the time of issue and redemption of debentures.

(*ii*) Show the 'Loss on Issue of Debentures Account' over the period.
(Adapted from All India SSCE Comptt., 1979)

[(*ii*) Transfer Rs. 1,00,000 every year to Profit and Loss Account].

17. On 1st April, 1985, a limited company issued debentures for Rs. 1,00,000 redeemable at par at the end of five year and it was resolved that a sinking fund shall be formed. The interest received on investments of sinking fund was 5% per annum. The investments were realised at a loss of Rs. 300 at the end of five years.

Reference to Sinking Fund Table shows that Re. 0·180975 invested at the end of each year, at 5% compound interest, will produce Re. 1 at the end of five years.

Pass the Journal Entries and draw up the necessary Ledger Accounts for five years assuming that investments have been made in multiples of hundred.
(All India SSCE, 1980)

(Investments at the end of first, second, third, and fourth year Rs. 18,100, Rs. 19,000, Rs. 19,900 and Rs. 21,000 respectively. Interest at the end of second, third, fourth and fifth year Rs. 905, Rs. 1,805, Rs. 2,850 and Rs. 3,900 respectively).

18. The debenture redemption fund of Duplex Limited stood at Rs. 8,00,000 represented by Rs. 10,00,000 (nominal) investments. The debentures stood in the books at Rs. 25,00,000 and the company sold Rs. 6,00,000 (nominal) investments at Rs. 84 per cent for the purpose of redeeming Rs. 50,000 debentures at a premium of 1%.

You are required to show the Ledger Accounts to record these transactions.

(Fer to Question No. 13).

19. On 31st March, 1989, Peacock Ltd. had outstanding 1,000 12% Debentures of Rs. 100 each. There was also Premium on Redemption of Debentures Account showing a balance of Rs. 10,000.

On 1st April, 1989 the company exercised the option of redeeming 10% of these Debentures purchased in the open market at Rs. 108.

Pass the necessary Journal Entry.

(Loss on redemption Rs. 200).

20. On 1st April, 1986, a company issued 40,000 12% debentures of Rs. 10 each repayable after three yeas. It has been decided to create a sinking fund for their redemption. Sinking Fund Table shows that annual instalment towards Sinking Fund comes to Rs. 12,084·60. The investment yields 10% interest.

Prepare Debentures Account, Sinking Fund Account and Sinking Fund Investment Account for a period of three years.

(*Adapted from Delhi SSCE, 1989*)

(Interest at the end of second and third year Rs. 1,208·46 and Rs. 2,537·76 respectively).

PRACTICAL EXERCISES—II

1. Show by means of Journal Entries the following at the time of issue on 1st April, 1984 and redemption after six years on 31st March, 1990:

(*i*) A Ltd. issues 20,000 13% Debentures of Rs. 100 each at a discount of 3% to be redeemed at par at the end of sixth year.

(*ii*) B Ltd. issues 10,000 13% Debentures of Rs. 100 each at a discount of 3% to be redeemed at a premium of 3% at the end of sixth year.

(*iii*) C Ltd. issues 15,000 14% Debentures of Rs. 100 each at par, to be redeemed at a premium of 4% at the end of sixth year.

(*iv*) D Ltd. issues 12,000 15% Debentures of Rs. 100 each at a premium of 3% to be redeemed at the end of sixth year.(*Adapted from Delhi SSCE, 1988*)

2. A company borrowed Rs. 20,000 from a bank and gave 250 debentures of Rs. 100 each as collateral security.

How will you show this item in the Balance Sheet ?

3. A company purchased assets of the book value of Rs. 99,000 from another firm. It was agreed that the purchase consideration be paid by issuing 11% Debentures of Rs. 100 each.

Record the transaction assuming debentures have been issued (*i*) at par (*ii*) at discount of 10% and (*iii*) at a premium of 10%.

(*Adapted from Delhi SSCE, 1983*)

(No. of Debentures issued : (*i*) 990 ; (*ii*) 1,100 , (*iii*) 900].

4. Prakash Enterprises Ltd. issued Rs. 10,00,000 Debentures on 1st April, 1986. These were to be redeemed on 31st March, 1989. For this purpose, the company established a Sinking Fund. Investments were expected to earn 5% interest per annum. Sinking Fund Tables show that Re. 0·317208 invested annually at 5% amounts to Re. 1 in 3 years. On 31st March, 1989 the bank balance was Rs. 4,20,000 before receipt of interest on sinking fund investments. On that date the investments were sold for Rs. 6,56,000.

Calculate the interest to the nearest rupee but investments will be made to the nearest of Rs. 100.

Show the Debentures Account, Sinking Fund Account and Sinking Fund Investment Account in the books of the company.

(*Adapted from All India SSCE, 1983*)

(Investments at the end of first and second year Rs. 31,700 and Rs. 33,300 respectively. Interest at the end of second and third year Rs. 1,585 and Rs. 3,250 respectively).

5. On 1st April, 1985 X Co. Ltd. issued Debentures for Rs. 1,00,000 redeemable at par at the end of 5 years and it was resolved that a Sinking Fund should be formed and invested in tax-free securities.

Give the necessary Ledger Accounts for 5 years, assuming that the interest received on investment was at the rate of 5 per cent on cost, that the interest was received yearly and immediately invested and that the investments were realised at the end of 5 years and the debentures were redeemed.

Reference to the Sinking Fund Table shows that Re. 0·180975 invested at the end of each year at 5% compound interest will produce Re. 1 at the end of 5 years. (*All India SSCE, 1982*)

(Debenture Interest Rs. 904·87, Rs. 1,855, Rs. 2,852·62, and Rs. 3,900·12).

6. On 1st April, 1985, a Limited Company issued debentures of the face value of Rs. 1,00,000 at a discount of 6%. The debentures were repayable by annual drawings of Rs. 20,000 made on 31st March each year. The directors decided to write off the discount on issue over the period of the debentures in such a way as to charge each year with an amount proportionate to debentures outstanding in that year.

Show the Discount Account in the Company's Ledger for the duration of the debentures.

(Discount transferred to Profit and Loss Account over five years as Rs. 2,000, Rs. 1,600, Rs. 1,200, Rs. 800 and Rs. 400 respectively).

7. Shakti Chemicals Ltd. issued 2,000 12% Debentures of Rs. 100 each on 1st April 1986, repayable at the end of three years at a premium of 5 percent. It is decided to set up a sinking fund for the purpose of redemption. The investments are expected to earn 10 per cent interest per annum.

The sinking fund tables show that in order to get Re. 1 after three years at 10 percent per annum an amount of Re. 0·30215 should be invested every year. At the end of the third year, the Investments were sold for Rs. 1,37,000 and the debentures were paid off. (Calculate the amount to the nearest rupee).

Prepare Debentures Account, Sinking Fund Account and Sinking Fund Investment Account for three years in the books of the Company.

(*Adapted from All India SSCE, 1985*)

(Interest at the end of second and third year Rs. 6,345 and Rs. 13,325 respectively).

8. On 1st April, 1986 a company issued 12% debentures of Rs. 10,00,000 at par. The debentures were redeemable at par after three years on 31st March, 1989. A sinking fund was set up to raise funds for redemption of debentures. The amount for the purpose was invested in 10% securities of Rs. 100 each available at par. The sinking fund table shows that if

investments earn 10% per annum, to get Re. 1 at the end of 3 years, one has to invest Re. 0·30215 every year together with interest that will be earned.

On 31st March, 1989 all the securities were sold at a total loss of Rs. 6,000 and the debentures were redeemed at par.

Prepare Debentures Account, Sinking Fund Account, Sinking Fund Investments Account and Interest on Sinking Fund Investments Account. Company closes its books of account every year on 31st March.

(Adapted from Delhi SSCE, 1987)

(Investments at the end of first and second year Rs. 3,02,100 and Rs. 3,32,400. Interest at the end of second and third year Rs. 30,210 and Rs. 63,450).

9. Dikaki Ltd. issued 12% Debentures of Rs. 100 each for Rs. 5,00,000 on 1st April, 1986. For the purpose of redemption of these debentures on 31st March 1990, the company established a Sinking Fund. The investments were expected to earn 10% net per annum. Sinking Fund Table shows that 0·21547 invested annually at 10% p.a. amounts to Re. 1 in four years. The investments of the company were sold for cash on 31st March, 1990 for a sum of Rs. 3,56,000. The bank balance as on that date was Rs. 2,55,000 before the receipt of interest on Sinking Fund Investments for that year.

Showing your calculations for the amount to be provided for Sinking Fund, prepare Sinking Fund Account, Sinking Fund Investment Account, 12% Debentures Account for 4 years and the Bank Account for 1989-90 to record the above transactions, assuming that the debentures-holders were paid their full amount on the due date. *(Adapted from All India SSCE, 1989)*

(Interest at the end of second, third and fourth year Rs. 10,773, Rs. 22,624 and Rs. 35,660).

10. On 1st April, 1988, a company issued 1,000 12% debentures of Rs. 500 each at Rs. 450 each. Debenture-holders were given an option to get their debentures converted into Equity shares of Rs. 100 each at a premium of Rs. 50 per share. On 31st March, 1989 one year's interest had accrued on these debentures which was not paid. A holder of 120 debentures informed that he wanted to exercise the option for conversion of debentures into Equity shares. The company, therefore, accepted his request and redeemed these 100 debentures by issuing him Equity shares. The interest, however, on these 100 debentures was paid to the debenture-holder in cash.

Pass the necessary Journal Entries to record the transaction in the books of the company. *(Adapted from Delhi SSCE, 1986)*

(Credit Share Capital Account with Rs. 40,000 and Share Premium Account with Rs. 20,000).

11. A company issued Rs. 1,00,000 12% debentures at 5% discount redeemable at 5% premium after 10 years. Assume further that debentures were redeemed out of debentures redemption fund account (having balance of Rs. 1,04,500 before redemption) created for the purpose. *(Delhi SSCE, 1983)*

Show Ledger Accounts before and after the redemption.

(Transfer Rs. 1,04,500 to General Reserve after the redemption is carried out).

12. A company has an outstanding liability of 10% Rs. 100 debentures amounting to Rs. 1,00,000 redeemable at the option of the company by drawing at par, or by purchase in the open market. It has a credit balance of Rs. 30,000 in the Profit and Loss Appropriation Account. It decides to redeem Rs. 25,000 debentures, and purchases Rs. 20,000 debentures in the open market at Rs. 99 each and draws Rs. 5,000 debentures.

Show the necessary Ledger Accounts. *(Delhi SSCE, 1984)*

(Profit on redemption Rs. 200. Transfer Rs. 5,000 to General Reserve).

13. A company issues 100 debentures of Rs. 1,000 each at 97 percent. These are repayable out of profits by equal annual drawings over five years. You are required to prepare for the first two years :

(*i*) Debentures Account
(*ii*) Discount on Issue of Debentures Account, and
(*iii*) General Reserve Account. *(All India SSCE, 1986)*

(Discount for first two years : Rs. 1,000 and Rs. 800. Transfer Rs. 20,000 to General Reserve in first year and also in second year).

14. A company issued 12% Debentures of Rs. 10,00,000 at 8% discount, redeemable at par. Assume further that debentures are to be redeemed by drawings method in the following manner :

Year-end	Amount (Face value)
	Rs.
2	1,00,000
3	2,00,000
4	3,00,000
5	4,00,000

Pass journal entry for issue of debentures and ledger account of discount on issue of debentures for 5 years. *(All India SSCE, 1984)*

(Discount on Issue of Debentures : First year Rs. 20,000, Second Year Rs. 20,000, Third Year Rs. 28,000, Fourth Year Rs. 14,000, Fifth Year Rs. 8,000).

15. On 31st March, 1989, the following balances stood in the books of a company :

	Rs.
12% Mortgage Debentures	10,00,000
Debenture Redemption Fund	10,07,360
Debenture Redemption Fund Investments :	
Rs. 4,00,000 9% Loan (1990)	3,80,000
Rs. 7,00,000 8% Govt. Paper	6,27,360

On the above date, investments were sold. 9% Loan (1990) was sold at par and 8% Govt. Paper at Rs. 95.

On 1st April, 1989, the debentures were redeemed.

Prepare the necessary Ledger Accounts in the books of the company.

(Profit on sale of Investments Rs. 57,640. Transfer balance of Debenture Redemption Fund, Rs. 10,65,000, to General Reserve).

16. On 1st April, 1986, Quick Sales Ltd. made an issue of 1,000 12% Debentures of Rs. 100 each at Rs. 96. The terms of issue provided that beginning with the year 1988-89, Debentures of the face value of Rs. 20,000

should be redeemed every year either by purchase in the open market or by draw of lots at par. The discount on issue of debentures was written off equally in 1986-87 and 1987-88.

In 1988-89, the Company purchased 60 Debentures at Rs. 95.50 on 30th September and 100 Debentures at Rs. 95·00 on 30th November. On 31st March 1989, the balance of Debentures required to be redeemed were paid off at par by draw of lots.

Draft necessary Journal entries in the books of the Company during 1986-87, 1987-88 and 1988-89 relating to the above. Ignore interest.

(Discount written off every year Rs. 800. Capital Profit on cancellation of Debentures Rs. 770).

17. On 1st April, 1988, a company made an issue of 1,000 10% debentures of Rs. 100 each. The terms of issue provided for the redemption of Rs. 10,000 annually, commencing from 31st March, 1989, either by drawings at par or by purchase in the market at the company's option.

At the end of 1989-90, the company purchased for cancellation Rs. 4,000 of its Debentures at 96, Rs. 3,000 at 98 at Rs. 1,000 and 97. The expenses of purchase amounted to Rs. 135.

The Board of directors decided to redeem the Debentures out of the appropriation of profits but without building up a Sinking Fund.

Record the entries of the above transactions in the Company's (Ledger) books. *(Adapted from All India SSCE, 1987)*

(Capital Profit on cancellation of Debentures Rs. 115).

18. On 1st April, 1986 Rajhans Limited issued 5,000 12% Debentures of Rs. 200 each redeemable at par. The Company decided to redeem these debentures in two equal instalments on 31st March, 1988 and 31st March, 1989. As per the terms of issue of debentures the company had the option to redeem by drawings or purchase from the open market. The company purchased 2,500 own debentures at Rs. 198 on 31st March, 1988 and 2,200 debentures at Rs. 190 on 31st March 1989 for the purposes of redemption. The remaining debentures were redeemed by drawings.

Journalise the above transactions and show the Ledger Accounts on the assumption that redemption is (*i*) out of profits, and (*ii*) out of capital.

(Capital Profit on redemption : 1987-88 Rs. 5,000 ; 1988-89 Rs. 22,000).

19. The Balance Sheet of XYZ Ltd. disclosed following information as on 31st March, 1989 :

(*a*) 12% Debentures Rs. 12,00,000.

(*b*) Debenture Sinking Fund Rs. 5,50,000.

(*c*) Debenture Sinking Fund Investments represented by Rs. 1,40,000

- Own Debentures purchased at 95 and the remaining amount by Rs. 4,55,000 9% Govt. Bonds.

On the above date the directors decided to redeem all the debentures. For this purpose, they realised 9% Govt. Bonds at 5% below par value. They utilised Rs. 2,00,000 for redemption out of the current year's profits. The redemption was duly carried out.

Give Journal Entries and show necessary Ledger Accounts.

(Capital Profit on cancellation of own Debentures Rs. 7,000 ; Revenue Profit on sale of 9% Govt. Bonds Rs. 20,250).

20. On 1st April, 1989, A Ltd. gave notice of its intention to redeem its outstanding Rs. 4,00,000 12% Debentures on 1st October 1989 at a premium of 2% and offered the holders the following options :

(*i*) To subscribe for :

(*a*) 14% preference shares of Rs. 20 each at Rs. 22.50 per share, accepted by holders of Rs. 1,71,000 stock.

or

(*b*) 14% debenture stock at 96% accepted by the holders of Rs. 1,44,000 stock.

(*ii*) To have their holdings redeemed for cash, where neither option under (*i*) was accepted.

You are required to pass the journal entries necessary to record the redemption and allotment under (*i*) (*a*) and (*i*) (*b*), and to state the amount of cash required to satisfy option (*ii*). (*All India SSCE Comptt., 1980*)

[(*i*) (*a*) 7,752 preference shares.
(*b*) 1,530 14% debentures
(*ii*) Rs. 86,700].

UNIT 3

Final Accounts of Companies

(5 Marks)

Balance sheet in the prescribed form with major headings only (Schedule VI, part one only).

7

Final Accounts of Companies

Some idea as to certain items appearing in the Balance Sheet of a company (like share capital, premium/discount on issue of shares, debentures, premium/discount/loss on issue of debentures, shares forfeited, etc.) was given in the last two Chapters. A company has to prepare its Balance Sheet according to the format as prescribed in Part I of Schedule VI to the Companies Act, 1956.

According to Sec. 211 of the Companies Act, 1956, the Balance Sheet of a company shall give a true and fair view of the state of affairs of the company as at the end of the financial year. Sec. 211 further requires that the Balance Sheet shall be in the form set out in Part I of Schedule VI to the Companies Act, 1956. If a company wants to modify any requirements as to the matters to be stated in the company's Balance Sheet, it has to apply to the Central Government. The Central Government may, on the application or with the consent of the Board of Directors of the company, modify the requirements of the Act for the purpose of adapting them to the circumstances of the company.

The Balance Sheet of a company, as set out in Schedule VI, may be either in (1) Horizontal form, or (2) Vertical form. The *pro forma* of these forms is given below :

SCHEDULE VI

Part—I FORM OF BALANCE SHEET

A. HORIZONTAL FORM

Balance Sheet of...

(Name of the Company)

as at...

(Date at which the Balance Sheet is made out)

Figures for the previous year	LIABILITIES	Figures for the current year	Figures for the previous year	ASSETS	Figures for the current year
	SHARE CAPITAL Authorised Issued Subscribed *Less* Calls unpaid *Add* Forfeited shares RESERVES AND SURPLUS SECURED LOANS UNSECURED LOANS CURRENT LIA-			FIXED ASSETS (at original cost *less* depreciation upto-date) INVESTMENTS CURRENT ASSETS LOANS AND ADVANCES (A) CURRENT ASSETS (B) LOANS AND ADVANCES	

BILITIES AND PROVISIONS (A) CURRENT LIABILITIES (B) PROVISIONS A footnote to show contingent liabilities			MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted) PROFIT AND LOSS ACCOUNT	

B. VERTICAL FORM

(Name of the Company)

Balance Sheet as at............

	Schedule No.	Figures as at the end of current financial year	Figures as at the end of previous financial year
I SOURCES OF FUNDS			
(1) *Shareholders' funds* :			
(*a*) Capital			
(*b*) Reserves and Surplus			
(2) *Loan funds* :			
(*a*) Secured loans			
(*b*) Unsecured loans			
II APPLICATION OF FUNDS			
(1) *Fixed assets*			
(*a*) Gross block			
(*b*) *Less* depreciation			
(*c*) Net block			
(*d*) Capital work in progress			
(2) *Investments*			
(3) *Current assets, loans and advances*			
(*a*) Inventories			
(*b*) Sundry debtors			
(*c*) Cash and bank balances			
(*d*) Other current assets			
(*e*) Loans and advances			
Less current liabilities and provisions			
(*a*) Liabilities			
(*b*) Provisions			
Net current assets			
(4) (*a*) Miscellaneous expenditure to extent not written off or adjusted			
(*b*) Profit and Loss Account			

Notes : (1) Details under each of the above items are given in separate Schedules. These Schedules contain all the information required to be given under Horizontal Form of Balance Sheet.

(2) The Schedules, accounting policies and explanatory notes that are attached form an integral part of the Balance Sheet.

(3) The figures in the Balance Sheet may be rounded off to the nearest '000' or '00' as may be convenient.

(4) A foot-note to the Balance Sheet may be added to show separately contingent liabilities.

MAJOR HEADINGS IN BALANCE SHEET

LIABILITIES SIDE OR SOURCES OF FUNDS

Share Capital

Share Capital is shown on the liabilities side of the Balance Sheet as follows :

SHARE CAPITAL

Authorised capital

.........shares of Rs.......each

Issued Capital

.........shares of Rs.......each

Subscribed Capital

.........shares of Rs.......each,
Rs.......per share called up

Of the above shares......shares are allotted as fully paid-up for consideration other than cash and ......shares are allotted as fully paid-up by way of bonus shares

Less Calls unpaid :
(*i*) By directors
(*ii*) By others
Add Forfeited shares (amount originally paid-up)

Notes : (1) Equity and preference shares should be shown separately and particulars of the different classes of the preference shares should be given.

(2) Terms of redemption or conversion (if any) of redeemable preference shares should be given.

(3) Any capital profit on re-issue of forfeited shares should be transferred to Capital Reserve under the next heading "Reserves and Surplus".

Illustration 1. Mahan Ltd. registered itself with an authorised capital of Rs. 10,00,000 consisting of 80,000 Equity Shares of Rs. 10 each and

20,000 Preference Shares of Rs. 10 each. It offered to the public 60,000 Equity and 20,000 Preference Shares payable as Rs. 2 on application, Rs. 3 on allotment, Rs. 3 on first call and Rs. 2 on second and final call.

The Company received applications for 56,000 Equity and 25,000 Preference Shares. It allotted Preference Shares on *pro rata* basis. 2,000 Equity Shares (out of those not applied for by public) were allotted to Gaurav from whom patent rights to manufacture a toy were purchased. Both the calls were made and duly received except from—

(*a*) Roy, a holder of 200 Equity Shares, who failed to pay First Call and Second and Final Call. Consequent upon Roy's failure to pay these calls, his shares were forfeited. 100 of the forfeited shares were re-issued at Rs. 8 per share fully paid,

(*b*) Shankar, the holder of 300 shares, who failed to pay Second and Final Call.

How will Share Capital appear in the Balance Sheet ?

Solution :

BLANCE SHEET OF MAHAN LTD. as at...............

Liabilities		Rs.
SHARE CAPITAL		
Authorised Capital	Rs.	
80,000 Equity Shares of Rs. 10 each	8,00,000	
20,000 Preference Shares of Rs. 10 each	2,00,000	
		10,00,000
Issued Capital		
60,000 Equity Shares of Rs. 10 each	6,00,000	
20,000 Preference Shares of Rs. 10 each,	2,00,000	
		8,00,000
Subscribed Capital		
58,000 Equity Shares of Rs. 10 each, fully called up	5,80,000	
20,000 Preference Shares of Rs. 10 each fully called up	2,00,000	
	7,80,000	
Less Calls in Arrears (Final Call on 300 Equity Shares)	600	
	7,79,400	
Add Shares Forfeited	500	
		7,79,900
Of the 58,000 Equity Shares, 200 shares are allotted as fully paid up to vendor of Patent Rights.		

Reserves and Surplus

The various items to be included under this head include :

(1) Capital Reserves.

(2) Capital Redemption Reserve.

(3) Share Premium Account.

(4) Other Reserves (specifing the nature of each reserve and the amount in respect thereof)

Less Debit balance in Profit and Loss Account (if any).

(5) Surplus, *i.e.*, balance in Profit and Loss Account after providing for proposed allocations, namely, dividend, bonus or reserves.

(6) Proposed additions to reserves.

(7) Sinking funds.

Notes. (1) Any additions and deductions to any of the above items since the last Balance Sheet must be shown under each of the specified heads.

(2) The word "Fund" in relation to any "Reserve" should be used only where such Reserve is specifically represented by really realisable and enmarked assets.

(3) The item Share Premium Account must include details of its utilisation in manner provided in Sec. 78 of the Companies Act, 1956 (which deals with Issue of Shares at a Premium). These details are to be shown in the year in which this Share Premium is utilised.

(4) *Other Reserves* [item (4)]. These are uncommitted general reserves of the company set aside out of profits and other surpluses to strengthen the financial position of the company.

If there is any debit balance in Profit and Loss Account, it is shown as a deduction from these reserves, if any. It will be a contradiction if these reserves are shown on the liabilities side of the Balance Sheet (which means the general financial condition of the company is good) and debit balance of Profit and Loss Account on the assets side of the Balance Sheet (which means the company is a losing concern).

Illustration 2. Compute the amount of 'Reserves and Surplus' from the following :

	Rs.
General Reserve	4,42,000
Profit and Loss Account (Dr.)	2,56,000
Shares Forfeited Account	22,000
Share Premium Account	2,00,000

Solution :

COMPUTATION OF RESERVES AND SURPLUS

		Rs.
Share Premium Account		2,00,000
General Reserve	4,42,000	
Less Debit balance of Profit and Loss A/c	2,58,000	1,84,000
		3,84,000

Secured Loans

These include—

(1) Debentures.

(2) Loans and advances from Banks.

(3) Loans and advances from subsidiaries.

(4) Other Loans and advances.

Notes : (1) Loans from directors should be shown separately.

(2) Interest accrued and due on any of the above items should be shown along with the item, like

14% Debentures	Rs. 5,00,000	
Add interest accrued	15,000	Rs. 5,15,000

(3) The nature of the security of each secured loan should be specified.

(4) Details of any guarantee of any secured loan given by managers and/or directors should be given.

(5) Terms of redemption or conversion (if any) of debentures issued should be stated together with earliest date of redemption or conversion.

Unsecured Loans

These include—

(1) Fixed deposits.

(2) Loans and advances from subsidiaries.

(3) Short-term loans and advances :

(*a*) From Banks.

(*b*) From others.

(4) Other loans and advances :

(*a*) From Banks.

(*b*) From others.

Notes : (1) Loans from directors/managers should be shown separately.

(2) Interest accrued and due on any item of loan should be shown as an addition to that item.

(3) Details of any guarantee by managers and/or directors should be given.

(4) Short term loans include those which are due for not more than one year as at the date of the Balance Sheet.

Illustration 3. Show the following items under the head 'Unsecured Loans' on the liabilities side of the Balance Sheet of Unique Limited, as on 31st March, 1989 :

	Rs.
Temporary loan for six months from Bank (Gururanteed by the personal guarantee of director, T. Shah)	2,00,000
Fixed Deposits from public	5,00,000
Loan from Bank for two years	3,00,000
Interest accrued on this loan	15,000
Loan on the mortgage of building	6,00,000
Loan from Marvel Limited, a subsidiary of the Company	2,50,000
Interest due on Fixed Deposits	5,000
Short-term loans from friends of directors	3,50,000
Loans from directors (for 9 months)	1,50,000

Solution :

BALANCE SHEET OF UNIQUE LTD. as at 31st March, 1989

Liabilities			Rs.
UNSECURED LOANS	Rs.	Rs.	
Fixed Deposits	5,00,000		
Add Interest accrued	5,000		
		5,05,000	
Loan from Marvel Ltd., a subsidiary		2,50,000	
Short-terms loans and advances :			
(*a*) From Bank (against personal guarantee of director T.Shah)	2,00,000		
(*b*) From others	3,50,000		
(*c*) From Directors	1,50,000		
		7,00,000	
Other loans and advances :			
From Bank	3,00,000		
Add Interest accrued	15,000		
		3,15,000	
			17,70,000

Current Liabilities and Provisions

This item is sub-divided under two heads, namely,—

(A) Current liabilities, and

(B) Provisions.

(*A*) *Current Liabilities*. This sub-head includes the following items :

(1) Acceptances (*i.e.*, bills payable)
(2) Sundry creditors.
(3) Subsidiary companies.
(4) Advance payments (by customers and clients).
(5) Unclaimed dividends.
(6) Other liabilities, if any.
(7) Interest accrued on any of the above items.

(*B*) *Provisions*. This sub-head includes the following items :

(8) Provision for taxation.
(9) Proposed dividends.
(10) Provision for contingencies.
(11) Provision for provident fund scheme.
(12) Provision for insurance, pension and similar staff benefit schemes.
(13) Other provisions.

Note : The period for which the dividends are in arrear should be stated. Further the amount of dividend should be stated before deduction of income-tax.

Footnote

A footnote to the liabilities side of the Balance Sheet is appended to show contingent liabilities. If a company has given any guarantees on behalf of its directors or other officers, the amount of such guarantees

should be stated. Where practicable, the general nature and amount of each contingent liability, if material, should also be stated.

Illustration 4. Calculate the amount of "Current Liabilities" to be shown under the heading 'Current Liabilities and Provisions" on the liabilities side of the Balance Sheet of a limited company.

	Rs.
Creditors for Goods	85,000
Creditors for Expenses	17,000
Bills Payable	58,000
Advances from Subsidiaries	45,000
Unclaimed Dividends	5,000
Income-tax Payable	70,000

Solution :

CALCULATION OF AMOUNT OF CURRENT LIABILITIES

	Rs.
Bills Payable	58,000
Sundry Creditors	
(*a*) For Goods	85,000
(*b*) For Expenses	17,000
Unclaimed Dividends	5,000
Income-tax Payable	70,000
	2,35,000

Illustration 5. Compute the amount of 'Provisions' to be shown under the heading ' Current Liabilities and Provisions' on the liabilities side of the Balance Sheet of a limited company.

	Rs.
Provision for Income-tax	1,70,000
Proposed Dividend	1,30,000
Unclaimed Dividend	7,000
Provision for Contingencies	20,000
Outstanding Interest on 15% Debentures	14,000

Solution :

COMPUTATION OF PROVISIONS UNDER THE HEAD 'CURRENT LIABILITIES AND PROVISIONS'

	Rs.
Provision for Income-tax	1,70,000
Proposed Dividend	1,30,000
Provision for Contingencies	20,000
	3,20,000

ASSETS SIDE OR APPLICATION OF FUNDS

Fixed Assets

This is the first major head on the assets side of the Balance Sheet of a company. The fixed assets are shown, distinguishing as far as possible, between expenditure upon

(*a*) Goodwill,
(*b*) Land,
(*c*) Buildings,
(*d*) Leasehold,

(e) Railway sidings,
(f) Plant and machinery,
(g) Furniture and fittings,
(h) Development of property,
(i) Patents, trade marks and designs,
(j) Livestock, and
(k) Vehicles, etc.

Notes : (1) Under each of the above heads, the following information has to be given :

(i) Original cost,

(ii) Additions thereto during the year,

(iii) Deductions therefrom during the year, and

(iv) Total depreciation written off or provided up to the end of the year.

(2) The total of fixed assets is known as "gross block". When depreciation is deducted from "gross block", the balance is known as "net block".

(3) If reduction in value of assets takes place because of reduction of capital or on revaluation of assets, Balance Sheet for next five years shall show–

(i) the reduced values of the assets in place of the original costs,

(ii) the date of the reduction, and

(iii) the amount of the reduction.

Likewise, if there has been any appreciation in the value of assets, the above details shall also be given.

Illustration 6. State the amount of "Fixed Assets" before depreciation, as per Schedule VI, as on 31st March, 1989 from the following details of a limited company :

	Rs.
Book value as on 1.4.88	10,80,000
Depreciation for the year	1,20,000

The fixed assets were purchased at Rs. 13,20,000 on 1st April, 1984.

Solution :

Fixed assets are shown in the Balance Sheet at original cost *less* depreciation upto the end of the year of the Balance Sheet. Hence the amount of 'Fixed Assets' before depreciation would be Rs. 13,20,000.

Illustration 7. Plant and Machinery were purchased by Steadfast Limited on 1st April, 1987 for Rs. 10,00,000. The Company decided to write off depreciation at the rate of 10% p.a. on written down value. The accounting year of the Company ends on 31st March.

How will Plant and Machinery appear in the Balance Sheet of the Company on 31st March, 1989 ?

Solution :

Assets		Rs.
FIXED ASSETS :		
	Rs.	
Plant and Machinery	10,00,000	
Less Depreciation	*1,90,000	
		8,10,000

*Depreciation is calculated as follows :

		Rs.
Depreciation for 1987-88		1,00,000
Written down value on 1st April, 1988	Rs. 9,00,000	
Depreciation for 1988-89		90,000
		1,90,000

Investments

'Investments' in the Balance Sheet of a company are shown under the following sub-headings :

(1) Investments in Government or Trust Securities.

(2) Investments in shares, debentures or bonds in—

(*a*) Subsidiary companies

(*b*) Other companies.

(3) Immovable properties.

(4) Investments in the capital of partnership firms.

Notes : (1) The nature of investments and the mode of their valuation (for example, cost or market value) should be shown.

(2) The following details should also be given :

(*a*) Aggregate amount of company's quoted investments and the market value thereof,

(*b*) Aggregate amount of company's unquoted investments.

(3) Interest accrued on Investments *is not* shown under 'Investments'. It is shown under the next heading "Current Assets".

Illustration 8. Calculate the total amount of 'Investments' from the following figures of a limited company :

Investments in :	Rs.
10% (Tax free) Mahanagar Telephone Nigam Ltd. Bonds	5,00,000
14% National Thermal Power Corporation (NTPC) Bonds	2,00,000
Interest accrued on Investments	25,000

Solution :

INVESTMENTS

	Rs.
10% (Tax free) Mahanagar Telephone Nigam Ltd. Bonds	5,00,000
14% National Thermal Power Corporation (NTPC) Bonds	2,00,000
Total	7,00,000

Current Assets, Loans and Advances

Current Assets, Loans and Advances of a limited company are shown in the Balance under the following headings :

(A) Current Assets, and

(B) Loans and Advances.

(A) *Current Assets.* These are shown under the following sub-headings :

(1) Interest accrued on investments.

(2) Stores and spare parts.

(3) Loose tools.

(4) Stock-in-trade.

(5) Works in progress.

(6) Sundry debtors—

(*a*) Debts outstanding for a period exceeding six months.

(*b*) Other debts.

Less Provision.

(7) Cash balance on hand.

(8) Bank Balances—

(*a*) with Scheduled banks, and

(*b*) with others.

(*B*) *Loans and Advances.* These are shown under the following sub-headings :

(9) Advances and loans to—

(*a*) subsidiaries.

(*b*) partnership firms in which the company or any of its subsidiaries is a partner.

(10) Bills of exchange.

(11) Advances recoverable in cash or in kind for value to be received, *e.g.*, rates, taxes, insurance etc.

(12) Balance with customs, port trust, etc., (where payable on demand).

Notes : (1) Mode of valuation of stock and works in progress should be stated. Amount in respect of raw material should be stated separately, where practicable.

(2) In regard the Sundry debtors, the following particulars should be given separately :

(*a*) debts considered good and in respect of which the company is fully secured ;

(*b*) debts considered good for which the company holds no security other than the debtors' personal security, and

(*c*) debts considered doubtful or bad.

(3) Debts due by directors or other officers of the company either severally or jointly with any other person should be separately stated.

(4) The maximum amount due by directors or other officers of the company at any time during the year should be shown by way of a note.

(5) The provision for bad and doubtful debts should not exceed the amount of bad and doubtful debts. If there is any surplus provision (taking into account the provision already created), it should be shown on the liabilities side of the Balance Sheet under the heading "Reserves and Surplus" as " Reserve for Doubtful or Bad Debts".

(6) In regard to bank balances, the following particulars should be given separately :

(*a*) Balances lying with Scheduled Banks on
  (*i*) current accounts,
  (*ii*) call accounts, and
  (*iii*) deposit accounts,

(*b*) Names of the bankers (other than Scheduled Banks) and the balance lying with each such banker on—
  (*i*) current accounts,
  (*ii*) call accounts, and
  (*iii*) deposit accounts.

Further, the maximum amount outstanding at any time during the year from each banker (other than Scheduled Banks) and the nature of the interest, if any, of any director or his relative in each of such banks should also be stated.

(7) The above notes regarding "Sundry Debtors" apply to "Loans and Advances" also.

Illustration 9. Calculate the amount of "Current Assets" to be shown under the heading "Current Assets, Loans and Advances" in the Balance Sheet of a limited company from the following details :

	Rs.
Cash in hand	20,000
Cash at bank	1,60,000
Sundry debtors	4,30,000
Stock	2,70,000
Investments	2,00,000
Interest accrued on Investments	20,000

Solution :

CURRENT ASSETS, LOANS AND ADVANCES

(A) CURRENT ASSETS

	Rs.
Interest accrued on Investments	20,000
Stock	2,70,000
Sundry Debtors	4,30,000
Cash in hand	20,000
Cash at bank	1,60,000
	9,00,000

Illustration 10. Calculate the amount of "Current Assets" to be shown in the Balance Sheet of a company under the heading "Current Assets, Loans and Advances".

	Rs.
Stock	4,60,000
Sundry Debtors	6,80,000
Cash in hand	60,000
Prepaid Rates Taxes	1,50,000
Bills Receivable	2,40,000
Cash at Bank	3,30,000
Loose Tools	1,40,000

Solution :

CURRENT ASSETS, LOANS AND ADVANCES

(A) CURRENT ASSETS

	Rs.
Loose Tools	1,40,000
Stock	4,60,000
Sundry Debtors	6,80,000
Cash in Hand	60,000
Cash at Bank	3,30,000
	16,70,000

Illustration 11. Find out the amount of "Loans and Advances" to be shown under the heading "Current Assets, Loans and Advances" in the Balance Sheet of a limited Company :

	Rs.
Bills Receivable	2,60,000
Fixed Deposit with a Bank	4,00,000
Unexpired Insurance	10,000
Prepaid Rent	15,000
Taxes paid in Advance	9,000
Preliminary Expenses	1,20,000
Balances with Customs	90,000
Advances to Subsidiaries	3,00,000

Solution :

CURRENT ASSETS, LOANS AND ADVANCES

(B) LOAND AND ADVANCES

	Rs.
Advances to Subsidiaries	3,00,000
Bills Receivable	2,60,000
Unexpired Insurance	10,000
Prepaid Rent	15,000
Taxes Paid in Advance	9,000
Balances with Customs	90,000
	6,84,000

Miscellaneous Expenditure (to the extent not written off or adjusted)

This heading includes the following items :

(1) Preliminary expenses.

(2) Expenses including commission or brokerage on underwriting or subscription of shares and debentures.

(3) Discount allowed on the issue of shares or debentures.

(4) Interest paid out of capital during construction period (also stating the rate of interest).

(5) Development expenditure not adjusted.

(6) Other items (specifying nature).

Illustration 12. Calculate the amount to be shown under the heading "Miscellaneous Expenditure" in the Balance Sheet of a limited company :

	Rs.
Preliminary Expenses (being one-fifth written off in third year)	20,000
Discount on Issue of Shares	80,000
Efficiency Award given to a worker	10,000
Depreciation on Vehicles	
Brokerage on Underwriting of Shares	40,000
Miscellaneous Business Expenses	5,000

Solution :

MISCELLANEOUS EXPENDITURE

	Rs.
Preliminary Expenses (2/5ths not written off)	40,000
Brokerage on Underwriting of Shares	40,000
Discount on Issue of Shares	80,000
	1,60,000

Illustration 13. How would the following items appear under the main heading 'Sources of Funds' in the vertical form of Balance Sheet of a company ? Ignore the items which you think should not appear under this heading.

	Rs.
Equity Share Capital	5,00,000
14% Preference Share capital	2,00,000
14% Convertible Debentures	2,50,000
Share Premium Account	50,000
General Reserve	70,000
Profit and Loss Account (Cr. Balance)	1,30,000
Cash and Bank Balances	80,000
Sundry Debtors	2,40,000
Prepaid Expenses	45,000
Sundry Creditors	1,50,000
Unsecured Loans	1,00,000

Solution :

SOURCES OF FUNDS

	Rs.	Rs.
(1) *Shareholders' Funds :*		
(*a*) *Capital :*		
Equity Share Capital	5,00,000	
14% Preference Share Capital	2,00,000	7,00,000
(*b*) *Reserves and Surplus :*		
Share Premium A/c	50,000	
General Reserve	70,000	
Profit & Loss A/c (Cr. Balance)	1,30,000	2,50,000
(2) *Loan Funds :*		
(*a*) Secured Loans		
14% Convertible Debentures	2,50,000	
(*b*) Unsecured Loans	1,00,000	3,50,000
		13,00,000

Illustration 14. Show the following items as they would appear under the heading "Application of Funds" in the vertical form of a Balance Sheet :

		Rs.
(*i*)	Fixed Assets at cost	12,50,000
(*ii*)	Additions during the year	2,00,000
(*iii*)	Depreciation upto date	2,50,000
(*iv*)	Investment in Shares and Debentures	2,30,000
(*v*)	Current Assets, Loans and Advances	6,70,000
(*vi*)	Current Liabilities and Provisions	3,00,000

Solution :

APPLICATION OF FUNDS

	Rs.	Rs.
(1) *Fixed assets :*		
Gross Block	12,50,000	
Additions during the year	2,00,000	
	14,50,000	
Less depreciation	2,50,000	12,00,000
(2) *Investments :*		
Investments in shares and debentures		2,30,000
(3) *Current assets, loans and advances*	6,70,000	
Less current liabilities and provisions	3,00,000	3,70,000
		18,00,000

TEST QUESTIONS

1. What are the two ways of presenting a company's Balance Sheet ? Give the format of a company's Balance Sheet as given in the Companies Act, 1956.

2. Give the Horizontal Form of the Balance Sheet of a company, with major headings, as prescribed by Schedule VI of the Companies Act, 1956.

3. Draft the *Pro Forma* of a Balance Sheet in vertical form as given in Schedule VI of the Companies Act, 1956.

4. How is the Share Capital of a company shown in Balance Sheet ? Take a practical case and show the treatment of Calls in Arrear and Shares Forfeited Account.

5. Under which major headings of the Balance Sheet of a company will you show the following items ?

(*a*) Calls in arrear

(*b*) Calls received in advance

(*c*) Share Premium Account

(*d*) Proposed addition to reserves

(*e*) Shares Forfeited Account

(*f*) Debit balance of Profit and Loss Account when general reserve is more than the debit balance of Profit and Loss Account.

(*g*) Debit balance of Profit and Loss Account when there is no general reserve.

6. What are the various items that fall under the heading "RESERVES AND SURPLUS" on the liabilities side of the Balance Sheet of a company ?

7. Arrange the following items under the heading 'CURRENT LIABILITIES AND PROVISIONS" on the liabilities side of the Balance Sheet of a company :

(*a*) Sundry Creditors ; (*b*) Bills Payable ; (*c*) Proposed Dividends ; (*d*) Unclaimed Dividends ; (*e*)Provision for Taxation.

8. How are contingent liabilities shown in the Balance Sheet of a company ? Take two examples of contingent liabilities and show them in the Balance Sheet.

9. How are FIXED ASSETS shown in the Balance Sheet of a company ? Take a practical case when there is addition to a fixed asset and deduction therefrom during the year.

10. How and where would the following items appear in the Balance Sheet of a limited company ?

(*a*) Purchase of a building as an investment ; (*b*) Investments in shares of other companies ; (*c*) Interest accrued on investments ; (*d*) Loose tools ; (*e*) Stock in trade ; (*f*) Sundry debtors ; (*g*) Bills receivable ; (*h*) Prepaid insurance ; (*i*) Bank balance.

PRACTICAL EXERCISES

1. Show the following items under the heading "Share Capital" on the liabilities side of the Balance Sheet of a limited company.

Authorised Capital— 1,00,000 shares of Rs. 10 each

Issued Capital — 80,000 Shares of Rs. 10 each

Subscribed Capital — 60,000 shares of Rs. 10 each, Rs. 8 called up.

Calls in arrear	Rs.	500
Calls in advance	Rs.	2,000
Shares Forfeited A/c	Rs.	2,500
Share Premium A/c	Rs.	1,20,000

Ignore the items that you think should not appear.

(Rs. 4,82,000)

2. Compute the amount of 'Reserves and Surplus' from the following information :

	Rs.
Shares Forfeited Account	3,000
General Reserve	5,00,000
Profit and Loss A/c (Cr.)	2,50,000
Share Premium Account	4,00,000
Premium on Redemption of Debentures	2,00,000

(Rs. 11,50,000)

3. Show the following items under the headings (*a*) 'Secured Loans' and (*b*) 'Unsecured Loans' as they would appear on the liabilities side of the Balance Sheet of a limited company :

	Rs.
Fixed Deposits from Public	20,00,000
Interest accrued on these Deposits	1,00,000
14% Debentures	50,00,000
Loan frm Bank (for 2 months)	3,00,000
Loans from friends of Directors	5,00,000
Loan on Mortgage of Building	15,00,000
Loan from a Subsidiary	4,00,000
Loan from Directors	2,00,000

[(*a*) Rs. 65,00,000 (*b*) Rs. 33,00,000]

4. Compute the amount of 'Share Capital' as per Schedule VI to the Companies Act, 1956 from the following details :

	Rs.
Equity Share Capital	4,62,000
Share Forfeited Account	38,000
Capital Reserve	50,000

(Rs. 5,00,000)

5. Calculate the amount of 'Current Liabilities' to be shown under the heading "Current Liabilities and Provisions" in the Balance Sheet of a limited company :

	Rs.
Bills payable	5,00,000
Creditors for Goods	7,00,000
Creditors for Expenses	50,000
Unclaimed Dividends	2,00,000
Proposed Dividends	4,00,000
Income-tax Payable	4,00,000
Advances from Subsidiaries	3,00,000
Provision for Income-tax	3,50,000
Provision for Contingencies	1,50,000

(Rs. 18,50,000)

6. State the amount of 'depreciation' to be deducted from Fixed Assets as on 31.3.1990 from the following figures :

	Rs.
Fixed Assets (written down value) as on 31.3.1989	24,30,000
Depreciation for the year ending :	
31st March, 1989	3,00,000
31st March, 1990	2,70,000

(Rs. 5,70,000)

7. State the amount of 'Fixed Assets' before depreciation as per Schedule VI as on 31st March, 1990 from the following details :

	Rs.
Book value as on 1.4.89	2,00,000
Depreciation for the year	30,000

The fixed assets were purchased at Rs. 3,50,000 on 1st June, 1985.

(Rs. 3,50,000)

8. Calculate the amount of 'Investments' from the following figures to be shown in the Balance Sheet of a limited company :

	Rs.
10% Port Trust Bonds	5,00,000
14% National Thermal Power Corporation Bonds	2,00,000
10% Mahanagar Telephone Nigam Bonds	3,00,000

Interest accrued on above Investments for six months 54,000.

(Rs. 10,00,00)

9. Calculate the amount of 'Current Assets' to be shown in the Balance Sheet of a limited company under the heading "Current Assets, Loans and Advances".

	Rs.
Stock	2,30,000
Sundry Debtors	3,40,000
Bills Receivable	80,000
Prepaid Expenses	50,000
Cash in Hand	20,000
Cash at Bank	1,10,000

(Rs. 7,00,000)

10. Find out the total of 'Loans and Advances' to be shown under the heading "Current Assets, Loans and Advances" in the Balance Sheet of a limited company :

	Rs.
Advance to Subsidiaries	2,00,000
Bills Receivable	58,000
Prepaid Rent	30,000
Unexpired Insurance	5,000
Taxes paid in Advance	7,000
Balances with Customs	1,20,000
Preliminary Expenses	17,000

(Rs. 4,20,000)

11. Calculate the amount of 'Miscellaneous Expenditure' to be shown in the Balance Sheet of a limited company from the following :

	Rs.
Preliminary expenses written off during the year	15,000
Balance of Preliminary expenses yet to be written of	75,000
Discount on Issue of Shares (not written off)	70,000
Prepaid expenses	12,000
Brokerage on Underwriting of Shares	30,000
Other miscellaneous business expenses	33,000
Depreciation	1,20,000

(Rs. 1,75,000)

12. Calculate the amount of "Sources of Funds" as it would appear in the Balance Sheet of a limited company prepared in vertical form :

	Rs.
Share Premium Account	2,30,000
Shares Forfeited Account	15,000
Equity Share Capital	2,00,000
Preference Share Capital	1,00,000
14% Debentures	1,50,000
Capital Reserve	35,000
Sinking Fund	70,000
Bank Loan	75,000
General Reserve	2,10,000
Profit and Loss Account	1,40,000

(Rs. 12,25,000)

13. Calculate the total of "Application of Funds" from the following details :

	Rs.	Rs.
Miscellaneous Expenditures:		
Written off	20,000	
Not written off	1,80,000	2,00,000
Net Block of Fixed Assets		5,00,000
Total Depreciation uptodate		1,70,000
Net Current Assets		3,00,000
Current Liabilities and Provisions		1,10,000

(Rs. 10,00,000)

14. Prepare Balance Sheet in vertical form from the details given below:

BALANCE SHEET of A. LTD. as at 31st March, 1990

Liabilities	Rs.	Assets		Rs.
Share Capital		*Fixed Assets*		
25,000 Equity Shares of Rs. 10 each, fully paid	2,50,000	Land and Buildings	4,50,000	
		Less Depreciation	50,000	4,00,000
1,000 14% Redeemable Preference Shares of Rs. 100 each, fully paid	1,00,000	Plant and Machinery	1,50,000	
		Less Depreciation	15,000	1,35,000
Reserve and Surplus		Furniture and Fittings	75,000	
General Reserve	2,40,000	*Less* Depreciation	10,000	65,000
Profit and Loss Account	1,60,000	*Investments*		
Secured Loans		9% IDBI Capital Bonds		1,00,000
14% Debentures	1,50,000	*Current Assets, Loans and Advances*		
Current Liabilities and Provisions		(A) Current Assets :		
(A) Current Liabilities :		Stock		1,65,000
Bills payable	60,000	Sundry Debtors		2,00,000
Sundry Creditors	1,40,000	Cash in Hand		25,000
(B) Provisions :		Cash at Bank		60,000
Provision for Taxation	65,000	(b) Loans and Advances :		
Proposed Dividend	35,000	Bills Receivable		40,000
		Prepaid Rent		10,000
	12,00,000			12,00,000

(Rs. 9,00,000)

ACCOUNTING IV

UNIT 4
Analysis of Financial Statements

(6 marks)

(*i*) **Meaning**
(*ii*) **Significance and Purpose**
(*iii*) **Limitations**

Analysis of Financial Statements

The financial statements of a business undertaking for an accounting period comprise—

(1) a balance sheet as at the close of that period,

(2) a profit and loss account for that period,

(3) a profit and loss appropriation account (in case of a company), and

(4) a flow statement which highlights the magnitute and causes of changes in funds and cash between two successive accounting dates.

These statements (collectively called financial statements) provide a fairly comprehensive picture of a business undertaking's condition and are a reflection on managerial performance. They also flash warning signals of impending difficulties.

The financial affairs of a business undertaking are of interest to a number of different groups, *viz.*,

(1) *management* which is interested in knowing the position, progress and prospects of the undertaking under their control ;

(2) *creditors* who are interested in the solvency of the undertaking *i.e.*, it would be able to pay its debts as and when they fall due ;

(3) *shareholders/ investors* who are primarily concerned with the profits and prospects for future growth and prosperity ;

(4) *Government* which requires financial statements for tax purposes, for collecting statistical information about the economy and for public policy decisions.

Each of the above groups has a different view point in analysing the financial statements and data, and draws its own conclusions.

FORMAT

Joint Stock Companies are required to publish their financial statements in the format set out in Part I of Schedule VI to the Companies Act, 1956. There is practically no chance of their deviation from the prescribed format as their accounts are audited by the Chartered Accountants. However, the first thing in Financial Statement Analysis is to verify critically the format of the published statements. The format of the Balance Sheet of a Joint Stock Company was discussed in detail in the last Chapter of Accounting III. A summarised form, with major headings, is given below :

BALANCE SHEET OF. . . . . .AS AT. . . . .

Figures for the previous year	*Liabilities*	Figures for the current year	Figures for the previous year	*Assets*	Figures for the current year
	1. Share Capital 2. Reserves and Surplus 3. Secured Loans 4. Unsecured Loans 5. Current Liabilities and Provisions : (A) Current Liabilities (B) Provisions			1. Fixed Assets 2. Investments 3. Current Assets, Loans and Advances : (A) Current Assets (B) Loans and Advances 4. Miscellaneous Expenditure 5. Profit and Loss Account	
	A foot-note to show Contingent Liabilities				

RELIABILITY

Once we have understood the format of the Balance Sheet of a Joint Stock Company as required by the Companies Act, 1956, the next step is to verify the reliability of the figures given in the Balance Sheet. The verification of the figures of the Balance Sheet is necessary to ascertain their reliability. Reliability of the Balance Sheet figures cannot be established until and unless a series of Balance Sheets are carefully studied and compared. However, the following main considerations are taken into account in order to ascertain reliability of the figures of the Balance Sheet :

1. *Depreciation.* Any company which maintains fixed assets has to make proper provision for depreciation of the assets which are shown in the Balance Sheet under proper heads. In this connection it must always be remembered that obsolete assets are completely written off. Depreciation figures for a series of years should be compared and if any change in the method of calculating depreciation is made by the company, it must be verified that the same was in the larger interest of the company.

2. *Method of Valuation of Stock and Investments.* The stock and investments are valued at cost or market price, whichever is lower. A

departure from this principle would affect the reliability of the Balance Sheet figures.

3. *Provision for Bad Debts.* It must be seen that the details regarding debts of the company are given in the Balance Sheet and adequate provision for possible bad debts during the financial year is made.

4. *Preliminary Expenses.* Any good company will not take long to write off the preliminary expenses and hence unwritten off expenses must be carefully scrutinised and the reasons for not writing them off be properly ascertained.

5. *Long Term Liabilities.* However large the business of a company, it cannot be carried on merely with share capital and hence it has to arrange long term loans from various sources. The terms and the date of payment of each such loan must be clearly given in the Balance Sheet. If any of these loans is to be repaid within the current financial year, it must be seen that adequate cash is available to meet the liability.

6. *Current and Contingent Liabilities.* It is essential that they are clearly stated in the Balance Sheet. If many items are added up together, it means there is something fishy in the affairs which the company wishes to hide.

7. *Profitability.* A company which earns large profits is definitely considered to be a good company and hence to judge the reliability of the balance sheet figures, the profit and loss account of the company must also be carefully examined.

MEANING OF FINANCIAL STATEMENT ANALYSIS

'To analyse' means to separate a whole into its component parts and examine their relationship for better understanding. In that sense, "analysing financial statements is a process of evaluating the relationship between the component parts of financial statements to obtain a better understanding of a firm's position and performance." In that sense, financial statement analysis is an investigative process. The purpose of analysis is to —

(1) highlight some specific items,

(2) convert information in financial statements in some comparative context, and

(3) identify relevant characteristics of the business concern and its financial structure.

The process of financial statement analysis helps in evaluating a business concern according to some specific objectives. It enhances and sharpens business managers' (insiders) ability to take decisions. It also enables outsiders interested in the information (shareholders, creditors, banks) to evaluate the organisation in financial perspective.

An understanding of analytical technique is important for several reasons.[1] Accountants frequently are consulted by clients or other individuals who have little experience with financial statements, but who are required to make financial decisions. Business managers or owners often ask their accountants to analyse business operations and to make recommendations that will improve efficiency. In addition, the accountant's knowledge of financial statement analysis is important in making decisions about the preparation and presentation of financial information. Only by understanding how financial statements are used can the accountant determine whether a particular financial statement presentation will be useful or misleading.

SIGNIFICANCE AND PURPOSE OF FINANCIAL STATEMENT ANALYSIS

The purpose of financial statement analysis depends on the individual needs of the person who is analysing these statements. And of course the purpose would vary with the requirements of the analyst. For example, a shareholder would be interested in the profitability whereas a short-term trade creditor would be concerned about the liquidity, *i.e.*, the concern's ability to meet its current obligations, and a debenture-holder would be interested in the concern's long-term solvency and its capital structure. The management, on the other hand, would be interested in further improving the efficiency and performance of the concern and also making reasonably accurate predictions about the future. The analysis of the financial statements may throw up various alternative courses of action that may produce different consequences. Of course the management will decide in its wisdom to select that alternative which produces the most favourable consequence.

Thus the purpose of financial statement analysis depends on the specific needs of the user. These varying needs may be :

(1) *Liquidity*. It refers to a business concern's ability to meet its current liabilities. It is consequently associated with existing and projected relationships between current liabilities and current assets. Liquidity, as already observed, is normally a concern of trade creditors or short-term creditors.

(2) *Solvency*. Solvency of a business enterprise is as a matter of fact concern both of creditors and owners (shareholders). It relates total liabilities to total assets.

Solvency means the ability of the business enterprise to meet its long-term debt obligations. For this purpose the asset base of the business enterprise must be strong enough to generate sufficient liquid resources to meet the debt obligations as they mature.

(3) *Profitability*. Profitability of a business enterprise is a precondition for its survival. It is also a measure of the success of the business enterprise.

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1. *Financial Accounting* by Copeland, Dascher and Davison, p. 422.

A business may sustain itself for a short period, if there are operating losses, but in the long term it must generate profits to survive. Profitability affects both long-term creditors and shareholders.

(4) *Marketability*. It refers to the prevailing market price of the shares of a company, and measures the current market worth of a shareholder's investments. The information given in financial statements causes immediate reaction in the stock market and is of particular concern to shareholders and potential investors.

PLAN OF ANALYSIS

The purpose of financial statement analysis depends on the specific needs of the user. The following interrelated steps lead to a meaningful interpretation of financial data :

1. Specification of the purpose of the analysis.
2. Identification of the measurement base.
3. Collection and processing of the information.
4. Comparison of the processed information with a standard.

1. *Purpose of the Analysis*. This has already been discussed in detail.

2. *Measurement Base*. The information contained in financial statements in terms of rupees is a common measurement base. It provides a basis for absolute comparison. The information in financial statements may be changed into percentages and ratios for relative comparison. This will be discussed in detail in the next chapter.

3. *Collection of Information*. These days, in large many cases, information is fed into computer for processing of information and its analysis. The purpose of processing the information is to isolate and highlight relevant relationships of various items between themselves and the mass of the data relating to financial statements.

4. *Comparison with a Standard*. The comparison is the key to most financial analysis. Absolute figures or ratios become more meaningful when expressed in a comparative format. For example, if the current year's sales are Rs. 20,00,000, they have one meaning if last year's sales were Rs. 5,00,000 and another if last year's sales were Rs. 1,00,00,000. A further discussion of this point will be found in a subsequent chapter.

FUTURE PROSPECTS

As already seen, many groups of people are interested in the continuous prosperity of a Joint Stock Company. Its profits are a reliable index of its prosperity. To judge its future prospects, it is essential that the fictitious assets and the expenses appearing in the Balance Sheet are ignored. The important points to be considered from the view point of various groups are as follows :

1. *Shareholders*. In a company, there are two types of shareholders, *viz.*, equity shareholders and preference shareholders. In a good company,

when all liabilities (other than capital) are subtracted from the total assets after deducting fictitious assets and expenses as stated earlier, the balance of the assets must not be less than the total share capital. If it is less than the capital, it means that a part of the capital has been eroded. The next important point is the rate of profit earned on the capital employed. A good rate of return assures the shareholders about the health of the company.

Preference shareholders are mostly interested in the security of their investment as well as the timely payment of the dividend. If the balance of assets after deducting all outside liabilities of the company from the value of assets is two to three times the Preference Share Capital, the investment of the preference shareholders is secure. As regards dividend on preference shares, to find out its regularity, it should be compared with the profit after provision for tax.

2. *Debenture-holders*. Debenture-holders are paid interest at a fixed rate. The profits before tax must be sufficient to pay the interest on debentures in time. If the debentures are secured against some asset, the value of the asset should be more than the claim of the debenture-holders. If these conditions are present, the future prospects of the company are good from the point of debenture-holders.

3. *Banks*. Banks grant loans to the company from time to time and hence they are also interested in the liquid position of the company. If the total current assets of the company are more than the amount of loan, the bank is satisfied about the position of the company. The bank judges the liquidity of the company on the basis of the difference between current assets and current liabilities because current liabilities cannot be ignored in any case. Any long term loan which is likely to be paid shortly must be treated as current liability for this purpose.

4. *Creditors*. To meet the liability towards creditors, only the current assets of the company are important. To ensure prompt payment to the creditors, it is essential that the current assets should be almost twice the current liabilities.

5. *Prospective Investors*. The shares of the company are generally traded in a stock exchange and the prospective investors acquire the shares of the company of their choice from the stock exchange. Before deciding to invest their money in the shares of a particular company, they will like to examine the short-term and long-term solvency, the amount of profit earned, the operating efficiency and the possibility of utilising additional funds profitably.

LIMITATIONS OF FINANCIAL STATEMENTS

There is no such thing that information contained in financial statements is sacrosanct. Sometimes what they conceal is more important and relevant than what they reveal. As such they suffer from many limitations, some of which are as follows :

1. *Personal judgments.* Financial statements are prepared from factual data recorded in accordance with the generally accepted accounting principles. There are many personal judgments which affect the recording of financial transactions and making various adjustments at the close of the period. For example, valuation of closing stock at cost price or cost or market price whichever is lower, method of depreciation of fixed assets, writing off a fictitious asset over a period of time, treatment of an expenditure as capital or revenue, will affect the financial position and profits of the business. Personal judgment, wherever used, is inherently subjective and this makes precision of the financial data difficult.

2. *Non-monetary factors.* The financial statements record only monetary transactions. Non-monetary factors like good employees-management relations, employees' morale, reputation and integrity of management like that of Tatas are not reflected by financial statements as they are incapable of being measured in monetary terms. These factors affect the management efficiency a great deal but are not reflected in the financial statements.

3. *Instability of money.* Financial statements, as already observed, record transactions in terms of money. The value of money has been constantly falling over the years because of spiralling inflation. It looks ludicrous to add the value of a building bought for Rs. 30,00,000 today to the value of a building bought 50 years ago for Rs. 50,000 (which may be worth Rs. 1,00,00,000 today). Yet this has to be done. As regards current assets and current liabilities, they fairly represent the current worth. But that does not hold good in regard to fixed assets and long-term liabilities. Price-level changes as such vitiate accounting records over time.

4. *Historic in value.* The financial statements are essentially historic and not prophetic. Although historic analysis (*i.e.*, analysis of figures over a period of time) isolates trends that have developed over time and helps in forecasting for the future, yet the future projections may not turn out to be as predicted because underlying conditions may not remain constant.

5. *Ignoring of social cost.* Unhindered growth of industry is not an enviable blessing. The increasing threat to public health from enormous pollution of air, water and soil from highly pollutive industries as also noise and light pollution involves social cost. The Governments have to spend a lot of money to contain and check this pollution. It is but fair that the polluters should equitably bear this burden. As yet no method has been evolved by which the polluters are made to bear this burden and as such this social cost is not reflected in the financial statements of polluters.

TEST QUESTIONS

1. What do you understand by 'Financial Statement Analysis' ?

2. Financial Statement Analysis has nothing to do with the Format of Balance Sheet of a limited company. Do you agree with this view ?

3. Financial Statement Analysis is an exercise in futility. What have you to say about this statement ?

4. Give the major headings in a *pro forma* Balance Sheet of a limited company as prescribed according to Schedule VI to the Companies Act, 1956.

5. Why must financial statements be analysed ?

6. What are the main factors to be taken into account in order to ascertain the reliability of the figures of a balance sheet ?

7. What is the purpose of Financial Statements Analysis ?

8. Contrast the concepts of 'Liquidity' and 'Solvency'.

9. The purpose of Financial Statements Analysis depends on the specific needs of the user. What may be these specific needs ? Elaborate.

10. What are the steps that should be followed to have a meaningful interpretation of financial data ?

11. Who are the people generally interested in the Financial Statements Analysis of a company ?

12. What are the limitations of financial statements ?

UNIT 5

Ratio Analysis

(15 marks)

(*i*) **Meaning of Ratio Analysis.**

(*ii*) **Meaning, Objectives and Computation of :**

(*a*) ***Liquidity Ratios :***
Current ratio,
Quick ratio.

(*b*) ***Solvency Ratios :***
Debt-equity ratio,
Interest coverage ratio,
Debt to total funds ratio.

(*c*) ***Activity Ratios :***
Capital turnover ratio,
Fixed assets turnover ratio,
Stock turnover ratio,
Debtors turnover ratio.

(*d*) ***Profitability Ratios :***
Gross profit ratio (GPR)
Net profit ratio (NPR)
Return on investment (ROI)
Return on equity (ROE)

Ratio Analysis

TOOLS OF ANALYSIS

There are three widely used technique of analysing financial statements, *viz.*,

1. Component Percentages and their changes,
2. Comparative Statements, and
3. Ratios.

1. COMPONENT PERCENTAGES

Percentages are used mostly to study the relative significance of any part in comparison with the whole, *e.g.*, each asset or a group of assets as a percentage of total assets, or each expense or revenue item as a percentage of net sales. The percentage relationship between a financial item and a significant total that includes that item is known as a *component percentage.*

Illustration 1. A condensed balance sheet of a company is given below :

BALANCE SHEET OF ABC CO. LTD. as at 31st March 1989

Assets	Rs.
Fixed Assets	90,000
Investments	32,000
Current Assets	50,000
Loans and Advances	28,000
	2,00,000
Share Capital	1,00,000
Reserves and Surplus	35,000
Loans	45,000
Current Liabilities	20,000
	2,00,000

Compute the percentage of each group of assets and liabilities and capital based on the totals.

Solution :

Statement showing component percentages of assets and liabilities of ABC Co. Ltd. as at 31st March, 1989

		%
Fixed Assets	$\frac{90,000 \times 100}{2,00,000}$	45
Investments	$\frac{32,000 \times 100}{2,00,000}$	16
Current Assets	$\frac{50,000 \times 100}{2,00,000}$	25
Loans and Advances	$\frac{28,000 \times 100}{2,00,000}$	14
		100
Share Capital	$\frac{1,00,000 \times 100}{2,00,000}$	50.0
Reserves and Surplus	$\frac{35,000 \times 100}{2,00,000}$	17.5
Loans	$\frac{45,000 \times 100}{2,00,000}$	22.5
Current Liabilities	$\frac{20,000 \times 100}{2,00,000}$	10.0
		1000

This analysis is known as **Vertical Analysis.** It shows the significance of each item in the total. This exercise is useful in itself only to a limited extent. For effective results comparisons must be made.

2. COMPARISON OF FINANCIAL STATEMENTS

To judge the reliability of the financial statements of an undertaking and to examine its future prospects, it is important that

(1) the financial statements of the undertaking for various years are compared, and also

(2) these statements are compared with the financial statements of similar other undertakings for the same period. The statements cannot be adequately evaluated if they are scrutinized by themselves. They must be compared with similar statements for earlier periods or dates with comparable statements of competing units or with composite data for the industry in which a given business operates. For any effective comparison the figures must be on common basis. Comparison may be of the following two types:

(*a*) **Absolute Comparison.** When figures for any two years are compared, it is known as absolute comparison. Below are given the most common figures of the Trading Account of a company for two years ending as on 31st March, 1988 and 1989 :

	1988 Rs.	1989 Rs.		1988 Rs.	1989 Rs.
Opening Stock	80,000	1,00,000	Sales (Net)	4,00,000	6,00,000
Purchases	3,00,000	4,56,000	Closing Stock	1,00,000	88,000
Manufacturing Expenses	70,000	1,08,000			
Gross Profit	50,000	24,000			
	5,00,000	6,88,000		5,00,000	6,88,000

From the comparison of the above figures, we can draw the following conclusions :

(*a*) Despite an increase in net sales, the gross profit of the company has decreased.

(*b*) The closing stock of the company has also decreased. It means that a part of stock of 1988 has been used up in 1989.

(*c*) The purchases and the manufacturing expenses have increased during 1989.

These conclusions do not in any way help us to understand clearly the reasons about the reduction in gross profit. To understand the reasons, the figures must be changed either into percentages or into ratios.

(*b*) **Relative Comparison.** When the figures in a statement are changed into percentages and ratios for comparison, it is known as relative comparison. If the above figures are reduced to percentages we get the following :

	1988		1989		Change in Percentage over 1988
	Rs.	Percentage to Sales	Rs.	Percentage to Sales	
Purchases	3,00,000	75.00	4,56,000	76.00	52.00
Manufacturing Exps.	70,000	17.50	1,08,000	18.00	54.29
Stock adjustment	(20,000)	(5.00)	12,000	2.00	—
Total Cost	3,50,000	87.5	5,76,000	96.00	64.57
Gross Profit	50,000	12.5	24,000	4.00	(52.00)
Sales	4,00,000	100.00	6,00,000	100.00	50.00

(Note : Figures within brackets indicate decreases).

From these figures we can now easily conclude as under :

(*a*) Cost of production has increased by 64.57% while sales have increased only by 50%.

(*b*) The reduction in profit is 52% which is due to the overall increase in cost.

(*c*) Due to the reduction in closing stock, a part of the advantage of

1988 has been consumed in 1989. Further, details of stock would have thrown better light on the working of the concern.

From the above discussion it is clear that analysis of financial statements can be made effective only when the absolute figures are reduced to percentages and ratios.

RATIOS

A ratio is the relation of one thing to another of which the quotient is the measure. Simply stated, it is a number expressed in terms of another. Thus comparison between two figures when expressed in one number is known as ratio. For example, if gross profit is Rs. 25,000 and sales are Rs. 5,00,000, the ratio of gross profit to sales is 25,000 ÷ 5,00,000 or .05 or 5 per cent (.05 × 100). Of course, a ratio has a meaning when the two accounting items are mutually interrelated. It would not make sense to find a ratio between premium on issue of shares and sales. The two items, of which ratio is to be found, must be inter-related and influence each other in a significant manner, like gross profit and turnover, current assets and current liabilities or return on capital employed.

A ratio may be expressed in any one of the following ways :

(1) *Ratio.* It may be defined as the relation between two items with respect to the number of items the first contains the second. Thus ratio of sales (Rs.5,00,000) to gross profit (Rs. 25,000) is $\frac{5,00,000}{25,000}$ or 20. In simple words it is a division of the first number by the other, and thus quotient is the ratio.

(2) *Proportion.* A ratio may also be expressed as a proportion, *e.g.*, profit sharing ratio between A and B is 2 : 1 or current assets to current liabilities ratio of a company is 2 : 1.

(3) *Rate.* It is indeed a ratio between two numerical facts covering generally a definite period of time, *e.g.*, the stock turnover is three times a year.

(4) *Percentage.* It is a special type of rate which expresses the relation between two numerical facts per hundred, *e.g.*, gross profit is 25% of sales.

We can easily derive dozens of ratios from a single set of financial statements, but generally a few alone are useful in a given situation. Although a large number of most frequently used ratios have been described in this chapter, the best possible ratios to be used in any analysis of financial statements should always be decided before hand and then only those ratios should be computed.

Selection of Suitable Ratios

The financial ratios are only a tool of analysis. In other words, they are a means to an end and not an end in themselves. Before selecting the suitable

ratios, it is important that some proper basis of comparison of actual figures should be clearly established. In this regard there are fundamental and commonly used basis of comparison.

(*a*) *Goals.* Companies which prepare budgets for evaluating operating performance can compare their actual performance with budgeted figures. Budgets are an expression of a planned programme of future economic activity. They show the expected performance of an undertaking under prevailing circumstances. Unless the circumstances change or the budget estimates are callously made, the budget is a good standard or norm for comparison.

(*b*) *Historical Figures.* In this case, the present performance of a company is compared with its past performance. This comparison has its own limitations. It does not provide a sound basis of judgment. It can at best tell us whether the present is better or worse than the past.

(*c*) *External criteria.* Here the comparison of the performance of one company is made with the performance of another competing company. In this comparison environmental and accounting differences create a lot of difficulties and hence this is rarely used in India.

From the above discussion it must be clear that the task of selecting suitable ratios is not a simple one. Hence ratios must be carefully selected, bearing in mind the broad objectives of the company and the objectives of the persons who intend to use them.

The cost and benefit consideration also plays an important part in the selection of ratios.

The following principles should be kept in mind while selecting suitable ratios for comparison :

1. *Ratios must be logically inter-related.* This simply means that only those ratios should be computed which are directly related with our objective. For example, if we want to test the solvency of a concern, the net profit ratio will be of no consequences.

2. *Pseudo ratios must be avoided.* The ratios must always be calculated from actual figures and not from concocted or expected or probable figures. There is always a lot of difference between expected and actual figures and hence pseudo ratios must be avoided in all cases of comparison.

3. *Ratio must be of some material factor of the business and not a trivial one.* In business various activities and transactions take place and they produce a cumulative effect which is very important for the business. If we start computing ratios for each and every transaction of the business, we shall be lost in a jumble of ratios and no worthwhile conclusion would be drawn. Hence only significant ratios should be calculated.

4. *Cost and benefit must be borne in mind.* This simply means that the use of ratios must not be a matter of show, prestige or fashion. Before using the ratios, the cost should be carefully calculated and it must be in accordance with the benefit to be derived from such ratios and their use in making comparisons.

5. *Ratios must be in accordance with the need of the concern.* Different industries require different ratios and the different firms in the same industry also require different ratios if they are operating in different ways. Hence, it is essential that we must select only those ratios which are in accordance with the needs of the concern.

6. *Ratios must also be in accordance with the problems of the business.* We know that the problems faced by a concern do change from time to time and they do not remain the same at different times. Hence, ratios must be chosen according to the needs of the current problem under investigation.

7. *Number of ratios must be reasonable.* Too many ratios obscure the comparison and too few ratios hinder the analysis. Hence the number of ratios must always be reasonable.

Uses of Accounting Ratios

Accounting ratios can be profitably used for judging the performance and financial position of a business undertaking, company or industry. The various ratios can be used for the following purposes, *viz.*,

(*a*) To compare the performance of a firm over a period of time.
(*b*) To make inter-firm comparisons.
(*c*) To compare the performance of a firm against the whole industry or against pre-determined standards.
(*d*) To compare the performance of one department of the firm against another department of the firm.
(*e*) To help future planning process.

In short, accounting ratios can be used as a technique for inter-firm, *i.e.*, within the firm and intra-firm, *i.e.*, between the firms, comparison, for judging performance and the financial strength of a firm or company.

TYPES OF ACCOUNTING RATIOS

There are a number of ratios that interest those who analyse financial statements. These ratios portray income statement relationships ; some are concerned with relationships of Balance Sheet items ; and still others portray inter-relationships of Balance Sheet and income statement items. Broadly these ratios can be grouped into the following categories :

1. Liquidity Ratios.
2. Solvency Ratios.
3. Activity Ratios.
4. Profitability Ratios.

The various ratios falling under these categories are discussed below :

LIQUIDITY RATIOS OR LIQUIDITY TESTS

'Liquidity' means a company's ability to meet its current liabilities. Liquidity ratios are mainly concerned with current liabilities, *i.e.*, obligations becoming due in short term and the current assets which provide the source to meet them readily. No company can be considered sound without having adequate liquidity. Liquidity ratios answer the question. "How readily or promptly can the current liabilities be met ?"

The main liquidity ratios are as follows :

(1) Current Ratio or Working Capital Ratio

This is the ratio of current assets to current liabilities. It is calculated as under :

$$\frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current assets include—

(*a*) Cash and Bank Balances.

(*b*) Bills Receivable.

(*c*) Debtors *less* provision for bad and doubtful debts. Debtors should exclude advances to employees (recoverable over long period or adjustable against salary or wages) or advances to suppliers of fixed assets like machinery.

(*d*) Stock of raw-material, semi-finished goods and finished goods. Obsolete stock should however be not included.

(*e*) Readily saleable securities (acquired out of surplus funds). These should not include long-term investments (like shares in subsidiary companies) or those securities which cannot be readily sold (for instance, shares in a private company or shares of a company which is under liquidation).

(*f*) Prepaid expenses.

Current liabilities include all sums payable within one year like creditors, bills payable, bank overdraft, income-tax payable, dividends payable, outstanding expenses, etc. It should be noted that if long-term liabilities, say debentures, are payable within the year, even these will be termed as current liabilities.

Purpose. The main purpose of this ratio is to measure the ability of the company to pay short-term liabilities and to judge its capacity to carry on business effectively.

This ratio is one of the most commonly used tests of financial position of a company. It portrays not merely the company's liquidity but also the margin of safety generally kept by management in order to face effectively the sporadic changes in the flow of funds through the current assets and liabilities accounts. If the flow of funds is smooth and uniform, a small safety margin will be sufficient. But in actual life such even flow is not possible and

hence a bigger margin is needed. The ideal current ratio is anything between 2:1 to 3:1. Thus if current ratio is 2:1, it indicates that current assets are twice the current liabilities.

It should be clearly understood that a very high current ratio is not necessarily good for a firm. In fact such a high ratio may be undesirable as it may indicate a situation where debts are not being collected efficiently or cash and bank balances may be under-utilised or there may be excessive stocks.

In order to draw suitable conclusions from the current ratio, the nature of current assets must also be taken into account. Two companies having same current ratios but different percentages of cash to other current assets are not equal from the point of view of liquidity. The company which has more of cash than other assets is more liquid than the one with a high percentage of inventory or stock.

Illustration 2. Calculate Current Ratio from the following information relating to a limited company :

	Rs.
Cash in hand	20,000
Cash at bank	1,40,000
Stock	4,70,000
Debtors	2,30,000
Creditors	60,000
Bills Payable	28,000
Income tax payable	1,20,000
Dividends payable	80,000
Bills Receivable	35,000
Prepaid insurance	5,000
Outstanding salaries	12,000

Solution:

$$\text{Current Ratio} = \frac{\text{Current Assets}}{\text{Current Liabilities}}$$

Current Assets = Cash in hand + Cash at bank + Stock + Debtors + Bills receivable + Prepaid insurance

= Rs. (20,000 + 1,40,000 + 4,70,000 + 2,30,000 + 35,000 + 5,000)

= Rs. 9,00,000

Current Liabilities = Creditors + Bills payable + Income tax payable + Dividends payable + Outstanding expenses

= Rs. (60,000 + 28,000 + 1,20,000 + 80,000 + 12,000)

= Rs. 3,00,000

$$\text{Current Ratio} = \frac{\text{Rs. } 9,00,000}{\text{Rs. } 3,00,000} = 3:1$$

Illustration 3. Calculate current assets from the following :

	Rs.
Sundry creditors	80,000
Bills payable	20,000
Tax payable	1,50,000
Working capital	3,30,000

Solution :

Current assets – current liabilities	=	Working capital
or Current assets	=	Current liabilities + Working capital
Current liabilities	=	Sundry creditors + Bills payable + Tax payable
	=	Rs. (80,000 + 20,000 + 1,50,000)
	=	Rs. 2,50,000
Current assets	=	Rs. 2,50,000 + 3,30,000
	=	Rs. 5,80,000

Illustration 4. Calculate the amount of current assets and current liabilities from the following :

Current ratio	=	3
Working capital	=	Rs. 4,00,000

Solution :

Let us say current liabilities are x

∴ Current assets are 3x

Working capital	=	Current assets – Current liabilities
∴ Working capital	=	$3x - x = 2x$
2x	=	Rs. 4,00,000
x	=	Rs. 2,00,000

Current liabilities are x or Rs. 2,00,000

Current assets are 3x or 3 × Rs. 2,00,000 = Rs. 6,00,000

Illustration 5. (*a*) The current ratio of a company is 2.5 : 1. Which of the following transactions would improve, reduce and not change it :

(*i*) Payment to trade creditors.

(*ii*) Sale of machinery for cash.

(*iii*) Purchase of goods for cash.

(*iv*) Issue of equity shares for cash (*Delhi SSCE*,1983)

(*b*) What will be the effect of above transactions if current ratio is less than 1?

Solution:

(*a*) (*i*) There is equal decrease in creditors and cash account. As the current ratio (given) is more than 1, this suggestion would improve the ratio. To prove this point, let us assume

Current liabilities are	Rs. 1,00,000
Then, current assets would be Rs. 1,00,000 × 2.5	Rs. 2,50,000

Let us further assume that creditors are paid Rs. 50,000 cash. After this transaction, the current assets are Rs. 2,00,000 and current liabilities are Rs. 50,000. Now the ratio is Rs. 2,00,000/Rs. 50,000, *i.e.*, 4 :1. This means the ratio improves.

(*ii*) There is increase in the amount of cash balance which is a current asset. There is no effect on current liabilities. So this transaction will improve the current ratio.

(*iii*) There is increase in goods or stock balance and there is corresponding decrease in another current asset balance, *i.e.*, cash balance. So, the current ratio is not affected by this transaction.

(*iv*) There is increase in bank balance without any corresponding effect on current liabilities. The current ratio would improve.

(*b*) If current ratio is less than 1, say .4 : 1 (opposite of 2.5 : 1), the above transactions may lead to different results. Let us prove this point with the first transaction :

Let the current liabilities be	Rs. 1,00,000
Then current assets are	Rs. 40,000
Payment to creditors	Rs. 20,000

After this transaction, current assets balance is Rs. 20,000 and current liabilities balance is Rs. 80,000 ; the ratio is Rs. 20,000/Rs. 80,000 or 0.25:1. This means the ratio is reduced further.

(*ii*) It would improve the current ratio.

(*iii*) There will be no effect on current ratio.

(*iv*) It would improve the current ratio.

(2) Acid Test Ratio

This ratio is a more severe test of short term solvency of a company. It is also known as *quick ratio* or *liquidity ratio*. This ratio is obtained by dividing quick assets by quick or current liabilities. Quick assets include cash, temporary investments held in lieu of cash, debtors, bank balance and bills receivable. These assets can be easily and readily converted into cash. Although inventory or stock is the principal current asset it is not included in quick assets because it takes time before it is converted into cash. Similarly prepaid expenses are not included in liquid or quick assets. This ratio is the measure of extent to which liquid resources are immediately available to meet immediate current liabilities. This ratio is calculated as under :

$$\frac{\text{Quick Assets}}{\text{Current Liabilities}}$$

Purpose. Current ratio is not a very effective measure of liquidity (as current assets include stock which may not be quickly converted into cash). The acid test ratio removes this shortcoming of current ratio by including only those assets which are either cash or can be readily converted into cash, like cash and bank balances, debtors, bills receivable, readily marketable securities. This ratio highlights the relationship between quick assets and current

liabilities. It indicates how many times current liabilities can be paid with quick assets.

An abnormally low acid test ratio indicates that the company runs a high liquidity risk. An abnormally high acid test ratio suggests that there are difficulties in collecting debts and bills receivables. Acid test ratio is of particular importance for banks and financial institutions.

It may be noted that a decline in current ratio and quick ratio indicates over-trading which may create problems for the company. Again a high current ratio and a low quick ratio mean a high investment in stock.

Illustration 6. Calculate Acid Test Ratio from the following Balance Sheet of a Limited Company as at 31st March, 1989 :

Liabilities	Rs.	*Assets*		Rs.
Share Capital:		Plant and Machinery		6,37,500
50,000 equity shares of		Furniture and Fixtures		25,000
Rs. 10 each, fully paid up	5,00,000	Stock		2,12,500
General Reserve	2,50,000	Sundry Debtors	1,90,000	
Capital Reserve	25,000	*Less* Provision for		
Profit and Loss Account	2,75,000	Bad Debts	10,000	1,80,000
Sundry Creditors	1,40,000	Marketable Securities		80,000
Bills Payable	20,000	Cash at Bank		70,000
Outstanding Expenses	17,500	Cash in Hand		50,000
Dividend Payable	40,000	Bills Receivable		40,000
Income Tax Payable	82,500	Prepaid Insurance		8,000
		Prepaid Rent		22,000
		Preliminary Expenses		25,000
	13,50,000			13,50,000

Solution :

Acid Test or Quick Ratio = $\dfrac{\text{Quick Assets}}{\text{Current Liabilities}}$

Quick Assets = Net Sundry Debtors + Marketable Securities + Cash at Bank + Cash in Hand + Bills Receivable

= Rs. 1,80,000 + 80,000 + 70,000 + 50,000 + 40,000

= Rs. 4,20,000

Current Liabilities = Sundry Creditors + Bills Payable + Outstanding Expenses + Dividend Payable + Income Tax Payable

= Rs. 1,40,000 + 20,000 + 17,500 + 40,000 + 82,500

= Rs. 3,00,000

Acid Test Ratio = $\dfrac{\text{Rs. } 4{,}20{,}000}{\text{Rs. } 3{,}00{,}000}$

= 1.4 : 1

Illustration 7. A firm has a current ratio of 3 : 1. Its net working capital is Rs. 2,00,000. You are required to determine —

(*i*) Current Assets

(*ii*) Current Liabilities

(*iii*) Liquid Assets assuming stock to be of Rs. 2,20,000

(*Delhi SSCE, 1985*)

Solution:

Working Capital	=	Current Assets – Current Liabilities
Let the current liabilities be x		
Then the current assets will be 3x		
and the working capital will be 3x – x	=	2x
This means 2x	=	Rs. 2,00,000
or x	=	Rs. 1,00,000
Current Liabilities	=	Rs. 1,00,000
Current Assets	=	Rs. 3,00,000
Liquid Assets	=	Current Assets – Stock
	=	Rs. 3,00,000 – Rs. 2,20,000
	=	Rs. 80,000

Other Liquidity Ratios. The other two ratios that fall under the category of liquidity ratios are:

1. Receivables to Sales Ratio, and
2. Stock Turnover Ratio.

The second ratio will be considered in detail in the category of 'Activity Ratios'. The first is considered hereunder briefly.

Receivables to Sales Ratio. Receivables include trade debtors and bills receivable. The amount of receivables to be taken for calculation of this ratio must be net, *i.e.*, after deducting bad debts if any and provision for doubtful debts. This ratio is calculated in relation to credit sales, if possible. This ratio tells us about the relationship between sales and receivables. This is another way of ascertaining the liquid position of an undertaking. This ratio is usually expressed in terms of percentage of Net Receivables to Credit Sales. The percentage ratio is computed as under :

$$\frac{\text{Net Receivables}}{\text{Net Credit Sales}} \times 100$$

With the help of this ratio, we can also calculate the average realisation or collection period. This is done by multiplying this ratio by the number of working days in a year, say 300, and dividing by 100.

SOLVENCY RATIOS

'Solvency' of a business undertaking means its ability to meet (*a*) the interest costs, and (*b*) its long-term liabilities as and when they become due. The lenders of money to a company are interested primarily in the security of their loan or, in other words, solvency of the company. The next consideration with them is the earning capacity of the company so that it is able to pay off

interest on the loan and also pay back the amount of the loan when it becomes due.

Important Solvency Ratios comprise—

(1) Debt-Equity Ratio,
(2) Interest Cover Ratio, and
(3) Debt to Total Funds Ratio.

(1) Debt Equity Ratio

The ratio between "long-term debts" of a company to the "shareholders' (or in case of a proprietary concern—proprietor's) fund", known as Debt Ratio, is found out as follows :

$$\frac{\text{Long-Term Debt}}{\text{Shareholders' Fund}}$$

This ratio is also termed as "Long-Term Debt Ratio". In case of industrial concerns, a ratio of 1 is considered safe. If the ratio is calculated between Long-Term Debt and Total Funds, it is called Debt-Equity Ratio. It is found out as follows :

$$\frac{\text{Long-Term Debt}}{\text{Shareholders' Fund + Long-Term Debt}}$$

Shareholders' Fund = Share Capital (both equity and preference) + Reserves and Surplus.

Long-term Debt = Debentures + Bank Loans + Other secured and unsecured Loans.

The lower this ratio, the better it is for creditors because they are more secure in that case, and this also indicates that more of the funds invested in the business are provided by the owners. A high Debt-Equity Ratio is a danger signal for creditors.

Purpose. The purpose of this ratio is to indicate the proportion of total funds acquired by the company by way of debt or in other words what percentage of funds used in a business is provided by creditors. This ratio indicates the soundness of the long-term financial policy.

It is always advisable for a company which can earn much more than the fixed rate of interest that it has to pay to the suppliers of funds (*i.e.*, creditors) to go in for loans. This is called *trading on equity*. But the question is: To what extent can a company go to borrow funds? At one time it was considered safe for a company not to raise more than 50 per cent of its long-term requirements by way of long-term loans but now the proportion can be between 2/3rds to 3/4ths. This means 66.7 per cent to 75 per cent of the long-term funds of a company may be raised by way of loans. It should however be clearly understood that in times of recession, a company which depends too much on this source of funds may have to face financial difficulties as interest burden may prove to be intolerable.

Illustration 8. From the following, calculate the Debt-Equity Ratio :

	Rs.
Equity Share Capital :	
10,000 Equity Shares of Rs. 10 each	1,00,000
General Reserves	45,000
Accumulated Profits	30,000
Debentures	75,000
Sundry Trade Creditors	40,000
Outstanding Expenses	10,000

(Delhi SSCE, 1981)

Solution:

$$\text{Debt-Equity Ratio} = \frac{\text{Long-Term Debt}}{\text{Shareholders' Fund} + \text{Long-Term Debt}}$$

Long-Term Debt = Debentures

= Rs. 75,000

Shareholders' Fund = Equity Share Capital + General Reserves + Accumulated Profits

= Rs. 1,00,000 + 45,000 + 30,000

= Rs. 1,75,000

$$\text{Debt-Equity Ratio} = \frac{\text{Rs. } 75{,}000}{\text{Rs. } 1{,}75{,}000 + \text{Rs. } 75{,}000} = 0.3 : 1$$

Illustration 9. Calculate Debt-Equity Ratio from the Balance Sheet of Cee Ltd., as at 31st March, 1989 :

Liabilities	Rs.	*Assets*	Rs.
40,000 equity shares of Rs. 10 each, fully paid up	4,00,000	Fixed Assets	10,00,000
2,000 14% redeemable preference shares of Rs. 100 each, fully paid up	2,00,000	Current Assets	7,50,000
Share Premium Account	40,000		
General Reserve	2,90,000		
Profit and Loss Account	70,000		
5,000 12.5% convertible debentures of Rs. 100 each, fully paid up	5,00,000		
Current Liabilities	2,50,000		
	17,50,000		17,50,000

Solution :

$$\text{Debt-Equity Ratio} = \frac{\text{Long-Term Debt}}{\text{Shareholders' Funds} + \text{Long-Term Debt}}$$

Long-Term Debt = 5,000 12.5% Convertible Debentures

= Rs. 5,00,000

Shareholders' Fund = Equity Share Capital + Preference Share Capital + Share Premium + General Reserve + Profit and Loss Account

$$= \text{Rs. } 4{,}00{,}000 + 2{,}00{,}000 + 40{,}000 + 2{,}90{,}000 + 70{,}000$$

$$= \text{Rs. } 10{,}00{,}000$$

$$\text{Debt-Equity Ratio} = \frac{\text{Rs. } 5{,}00{,}000}{\text{Rs. } 10{,}000{,}000 + \text{Rs. } 5{,}00{,}000} = .33 : 1$$

Illustration 10. Will the following items decrease or increase or have no effect on the Debt-Equity Ratio of a limited company ?

Assume that this ratio is.5 : 1.

(*i*) Issue of new Share Capital Rs. 1,00,000

(*ii*) Redemption of Debentures Rs. 2,00,000

(*iii*) Allotment of 10,000 Equity Shares of Rs. 10 each fully paid for purchase of Machinery from Enkay Ltd.

(*iv*) Conversion of 14% Debentures into Equity Shares worth Rs. 2,00,000.

(*v*) Purchase of Machinery for Cash Rs. 1,50,000

Solution :

(*i*) Issue of new Share Capital will increase the proportion of shareholders' fund in the total of long-term funds. So, this item will decrease Debt-Equity Ratio. *i.e.*, the proportion of long-term creditors in the total of long-term funds will decline.

(*ii*) Repayment to debenture-holders will reduce the amount due to long-term creditors. Hence this item will reduce Debt-Equity Ratio.

(*iii*) Allotment of shares for purchase of Machinery will increase the amount of shareholders' fund. Hence this item will also reduce Debt-Equity Ratio.

(*iv*) Conversion of Debentures in Equity Shares will reduce the claim of debenture-holders and will increase the claim of shareholders. Hence, the Debt-Equity Ratio will decline.

(*v*) Purchase of Machinery for cash will affect machinery and cash accounts. This item will have no effect on Debt-Equity Ratio.

(2) Interest Coverage Ratio or Fixed Charges Cover

This ratio measures the number of times the fixed interest charge is covered by the periodic profit. It is calculated as follows :

$$\frac{\text{Net Profit before Interest and Tax}}{\text{Fixed Interest Charge (\textit{i.e.}, Interest on Long-Term Loans and Debentures)}}$$

If the fixed interest charge on long-term loans and the profit for a year are Rs. 50,000 and Rs. 5,00,000, the interest coverage ratio will be :

$$\frac{5{,}00{,}000}{50{,}000} = 10 \text{ times}$$

Purpose. The purpose of this ratio is to measure the debt servicing capacity of a company in so far as fixed interest on long-term loans is concerned. This ratio further indicates the extent to which the profit of the undertaking may decrease without in any way affecting its ability to meet interest obligations.

Illustration 11. Calculate Fixed Charges Cover from the following information relating to a limited company :

	Rs.
Net Profit after interest and tax	3,15,000
Provision for income tax	3,15,000
14% 5,000 Debentures of Rs. 100 each, fully paid up	5,00,000

Solution:

Fixed Charges Cover $= \dfrac{\text{Net Profit before Interest and Tax}}{\text{Fixed Interest Charge}}$

Interest on Debentures $= \dfrac{14}{100} \times \text{Rs. } 5,00,000 = \text{Rs. } 70,000$

Net profit before Tax and Interest = Rs. 3,15,000 + 3,15,000 + 70,000
= Rs. 7,00,000

Fixed Charges Cover $= \dfrac{\text{Rs. } 7,00,000}{\text{Rs. } 70,000}$, *i.e.*, 10 times.

Illustration 12. Calculate Net Profit after Interest and Tax of a limited company from the following details :

Interest Coverage Ratio	15 times
Fixed Interest Charge	Rs. 40,000
Rate of Income Tax	50%

Solution:

Interest Coverage Ratio $= \dfrac{\text{Net Profit before Interest and Tax}}{\text{Fixed Interest Charge}}$

$15 = \dfrac{\text{Net Profit before Interest and Tax}}{\text{Rs. } 40,000}$

Net Profit before Interest and Tax (Rs. 40,000 x 15) = Rs. 6,00,000

Less Interest Charge	Rs. 40,000	
Provision for Tax, *i.e.*, 50% of (Rs. 6,00,000 – Rs. 40,000)	2,80,000	Rs. 3,20,000
Net Profit after Interst and Tax		Rs. 2,80,000

(3) Debt to Total Funds Ratio

This ratio indicates what percentage of total funds is provided by short-term and long-term creditors. It is calculated as follows :

$$\frac{\text{Debt (i.e., Current Liabilities and Long-Term Loans)}}{\text{Total Funds (i.e., Shareholders Fund + Long-Term Loans + Current Liabilities)}}$$

Creditors prefer a low Debt to Total Funds Ratio as it implies that more of funds used in a business are provided by owners.

Illustration 13. Calculate Debt to Total Funds Ratio from the following details :

Extracts from Balance Sheet

Liabilities	Rs.
Share Capital	
10,000 equity shares of	
Rs. 10 each, fully paid up	1,00,000
Reserves and Surplus	
Profit and Loss Account	2,00,000
Secured Loans	
Loan from Industrial Finance Corporation of India	5,00,000
(against hypothecation of Plant and Machinery)	
Current Liabilities	
Sundry Creditors	1,20,000
Bills Payable	65,000
Outstanding Expenses	15,000

Solution :

Debt to Total Funds Ratio $= \dfrac{\text{Debt}}{\text{Total Funds}}$

Debt = Secured Loans + Sundry Creditors + Bills Payable + Outstanding Expenses

= Rs. 5,00,000 + 1,20,000 + 65,000 + 15,000

= Rs. 7,00,000

Total Funds = Share Capital + Profit and Loss Account + Secured Loans + Sundry Creditors + Bills Payable + Outstanding Expenses

= Rs. 1,00,000 + 2,00,000 + 5,00,000 + 1,20,000 + 65,000 +15,000

= Rs. 10,00,000

Debt to Total Funds Ratio $= \dfrac{\text{Debt}}{\text{Total Funds}} = \dfrac{\text{Rs. } 7,00,000}{\text{Rs. } 10,00,000}$

= 0.7 : 1

Illustration 14. Compute Debt to Total Funds Ratio from the following information relating to a limited company :

	Rs.
Current Assets	3,50,000
Net Working Capital	2,00,000
Net Worth	5,50,000
Debentures	3,00,000

Solution :

Debt to Total Funds Ratio $= \dfrac{\text{Debt}}{\text{Total Funds}}$

Debt = Debentures + Current Liabilities (Current

$$= \text{Rs. } 3,00,000 + 1,50,000 \text{ (Rs. } 3,50,000 - \text{Rs. } 2,00,000)$$

$$= \text{Rs. } 4,50,000$$

Total Funds = Net Worth (*i.e.*, Shareholders' Funds) + Debentures + Current Liabilities

$$= \text{Rs. } 5,50,000 + 3,00,000 + 1,50,000$$

$$= \text{Rs. } 10,00,000$$

$$\text{Debt to Total Funds Ratio} = \frac{\text{Debt}}{\text{Total Funds}} = \frac{\text{Rs. } 4,50,000}{10,00,000}$$

i.e., 0.45 : 1.

ACTIVITY RATIOS

These ratios are also known as 'performance ratios' or 'turnover ratios'.

Performance or activity ratios are a measure of the use of facilities at the disposal of a company or, in other words, they are a measure of the efficiency. of the company. They are also known as turnover ratios as they indicate how efficiently and rapidly are the resources of the company, like stock, fixed assets, working capital, debtors, being turned over. These ratios are usually calculated on the basis of sales or cost of sales.

Some of the activity ratios are discussed below :

(1) Total Capital Turnover Ratio

This ratio indicates the relationship between capital employed and the amount of sales. The term 'capital employed' includes the total of shareholders' funds and long-term loans reduced by the amount of non-trading investments and fictitious assets like profit and loss account (debit balance), discount on issue of shares, preliminary expenses.

Shareholders' funds represent the total of share capital (equity as well as preference) and the total of reserves and surplus in the form of share premium, general reserve, capital reserve, profit and loss account as reduced by fictitious assets. Long-term loans mean the total of secured loans (debentures, bank loans, loans from financial institutions etc.) and unsecured loans. The ratio is calculated as under :

$$\frac{\text{Cost of sales or sales}}{\text{Capital employed}}$$

The higher the ratio, the better it is.

Illustration 15. Calculate Total Capital Turnover Ratio from the following details :

	Rs.
Cost of Sales	10,00,000
Share Capital	2,00,000
General Reserve	3,00,000

Solution :

$$\text{Total Capital Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Shareholders' Funds + Long-Term Loans}}$$

Cost of Sales = Rs. 10,00,000

Shareholders' Funds = Share Capital + General Reserve

= Rs. 2,00,000 + 3,00,000 = Rs. 5,00,000

$$\text{Total Capital Turnover Ratio} = \frac{\text{Rs. } 10,00,000}{5,00,000} = 2 \text{ times}$$

Illustration 16. Calculate Total Capital Turnover Ratio from the following details on (*a*) cost of sales basis, and (*b*) sales basis.

	Rs.
1,00,000 equity shares of Rs. 10 each, Rs. 7 paid up	7,00,000
1,000 14% redeemable preference shares of Rs. 100 each, fully paid up	1,00,000
3,000 12.5% convertible debentures of Rs. 100 each, fully paid up	3,00,000
General Reserve	1,22,500
Profit and Loss Account	77,500
Non-trading investments :	
Indra Vikas Patra	3,00,000

The total cost of sales amounted to Rs. 16,00,000. The rate of gross profit earned has been 20% on sales.

Solution :

$$(a) \text{ Total Capital Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Capital employed}}$$

Capital employed = Equity Share Capital + Preference Share Capital + Convertible Debentures + General Reserve + Profit and Loss Account – Non-trading Investments.

= Rs. 7,00,000 + 1,00,000 + 3,00,000 + 1,22,500 + 77,500 – 3,00,000

= Rs. 10,00,000

$$\text{Total Capital Turnover Ratio (On Cost of Sales basis)} = \frac{\text{Rs. } 16,00,000}{\text{Rs. } 10,00,000}, \text{ i.e., } 1.6 \text{ times.}$$

$$(b) \text{ Total Capital Turnover Ratio} = \frac{\text{Sales}}{\text{Capital employed}}$$

Rate of Gross Profit = 20% on sales or 25% on cost of sales

$$\text{Gross Profit} = \frac{25}{100} \times \text{Rs. } 16,00,000 = \text{Rs. } 4,00,000$$

Sales = Cost of Sales + Gross Profit

= Rs. 16,00,000 + Rs. 4,00,000

= Rs. 20,00,000

$$\text{Total Capital Turnover Ratio (On Sales basis)} = \frac{\text{Rs. } 20,00,000}{\text{Rs. } 10,00,000}, \text{ i.e., } 2 \text{ times}$$

(2) Fixed Assets Turnover Ratio

This ratio indicates the relationship between net fixed assets and sales or cost of sales. This ratio reveals whether fixed assets are being used efficiently or not. A high ratio will mean that fixed assets are being used efficiently. It is calculated as under :

$$\frac{\text{Sales or Cost of Sales}}{\text{Net Fixed Assets (\textit{i.e.}, Fixed Assets \textit{less} Depreciation)}}$$

An improvement in this ratio suggests better performance and a reduction in this ratio indicates declining efficiency. This ratio is of particular importance in manufacturing units.

Illustration 17. Calculate Fixed Assets Turnover Ratio from the following information relating to a firm for the year 1988-89 :

	Rs.
Sales	15,00,000
Gross Profit	$33\frac{1}{3}\%$
Fixed Assets (at cost)	3,70,000
Total Depreciation upto date	1,20,000

Solution :

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Sales or Cost of Sales}}{\text{Net Fixed Assets}}$$

$$\text{Cost of Sales} = \text{Sales} - \text{Gross Profit}$$

$$= \text{Rs. } 15,00,000 - (\frac{1}{3} \times \text{Rs. } 15,00,000)$$

$$= \text{Rs. } 10,00,000$$

$$\text{Net Fixed Assets} \quad \text{Rs. } 3,70,000 - \text{Rs. } 1,20,000$$

$$= \text{Rs. } 2,50,000$$

$$\text{Fixed Assets Turnover Ratio (On Sales basis)} = \frac{\text{Rs. } 15,00,000}{\text{Rs. } 2,50,000}, \textit{ i.e.}, \text{ 6 times.}$$

$$\text{Fixed Assets Turnover Ratio (On Cost of Sales basis)} = \frac{\text{Rs. } 10,00,000}{\text{Rs. } 2,50,000}, \textit{ i.e.}, \text{ 4 times.}$$

Illustration 18. Calculate Fixed Assets Turnover from the following information elating to a firm for the year 1988-89 :

	Rs.
Cash Sales	3,45,000
Credit Sales	8,55,000
Buildings	2,00,000
Furniture	60,000
Debtors	2,27,000
Stock	1,33,000
Machinery	3,40,000

Cash at Bank	45,000
Prepaid Insurance	5,000
Reserve for Doubtful Debts	10,000

Solution :

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Sales}}{\text{Net Fixed Assets}}$$

$$\begin{aligned}\text{Total Sales} &= \text{Cash sales + Credit sales}\\ &= \text{Rs. } 3{,}45{,}000 + 8{,}55{,}000\\ &= \text{Rs. } 12{,}00{,}000\\ \text{Fixed Assets} &= \text{Buildings + Furniture + Machinery}\\ &= \text{Rs. } 2{,}00{,}000 + 60{,}000 + 3{,}40{,}000\\ &= \text{Rs. } 6{,}00{,}000\end{aligned}$$

$$\text{Fixed Assets Turnover Ratio} = \frac{\text{Rs. } 12{,}00{,}000}{\text{Rs. } 6{,}00{,}000}, \text{ i.e., 2 times.}$$

(3) Net Working Capital Turnover Ratio

This ratio indicates how well the working capital is being utilised. It is calculated as under :

$$\frac{\text{Sales or Cost of Sales}}{\text{Net Working Capital (i.e., Current Assets − Current Liabilities)}}$$

Net Working Capital represents the difference between current assets and current liabilities. Current assets are those which are cash and which can be converted into cash within one year, *e.g.*, cash in hand, cash at bank, stock, debtors, bills receivable, prepaid expenses. Current liabilities, on the other hand, mean those items which are due for payment within one year, *e.g.*, sundry creditors, bills payable, outstanding expenses and these are paid out of current assets.

Net Working Capital Ratio is more reliable than the Stock Turnover Ratio, as it explains efficiency or inefficiency in the use of the whole of working capital (rather than a part of it as invested in stocks as in case of Stock Turnover Ratio).

Illustration 19. Calculate Net Working Capital Turnover Ratio from the following information relating to a firm for the year 1988-89 :

	Rs.
Sales	6,00,000
Gross Profit	25%
Current Assets	2,08,000
Current Liabilities	58,000

Solution :

$$\text{Net Working Capital Turnover Ratio} = \frac{\text{Sales or Cost of Sales}}{\text{Net Working Capital}}$$

$$\begin{aligned}\text{Cost of Sales} &= \text{Sales − Gross Profit}\\ &= \text{Rs. } 6{,}00{,}000 - (\text{Rs. } 6{,}00{,}000 \times 25/100)\\ &= \text{Rs. } 4{,}50{,}000\end{aligned}$$

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$
$$= \text{Rs. } 2{,}08{,}000 - \text{Rs. } 58{,}000$$
$$= \text{Rs. } 1{,}50{,}000$$

$$\text{Net Working Capital Turnover Ratio (On Sales basis)} = \frac{\text{Rs. } 6{,}00{,}000}{\text{Rs. } 1{,}50{,}000}, \textit{ i.e., } 4 \text{ times}$$

$$\text{Net Working Capital Turnover Ratio (On Cost of Sales basis)} = \frac{\text{Rs. } 4{,}50{,}000}{\text{Rs. } 1{,}50{,}000}, \textit{ i.e., } 3 \text{ times.}$$

Illustration 20. Calculate Net Working Capital Turnover Ratio from the following information relating to a firm for the year 1988-89 :

	Rs.
Cash at Bank	1,80,000
Prepaid Expenses	20,000
Preliminary Expenses	45,000
Interest accrued on Investments	60,000
Sundry Debtors	2,60,000
Stock	2,30,000
Bills Payable	50,000
Sundry Creditors	1,15,000
Income Tax Payable	85,000
Cost of Goods Sold	25,00,000

Solution :

$$\text{Net Working Capital Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Net Working Capital}}$$

$$\text{Cost of Goods Sold} = \text{Rs. } 25{,}00{,}000$$

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$

$$\text{Current Assets} = \text{Cash at Bank} + \text{Prepaid Expenses} + \text{Interest accrued on Investments} + \text{Sundry Debtors} + \text{Stock}$$
$$= \text{Rs. } 1{,}80{,}000 + 20{,}000, + 60{,}000 + 2{,}60{,}000 + 2{,}30{,}000$$
$$= \text{Rs. } 7{,}50{,}000$$

$$\text{Current Liabilities} = \text{Bills Payable} + \text{Sundry Creditors} + \text{Income Tax Payable}$$
$$= \text{Rs. } 50{,}000 + 1{,}15{,}000 + 85{,}000$$
$$= \text{Rs. } 2{,}50{,}000$$

$$\text{Net Working Capital} = \text{Current Assets} - \text{Current Liabilities}$$
$$= \text{Rs. } 7{,}50{,}000 - \text{Rs. } 2{,}50{,}000$$
$$= \text{Rs. } 5{,}00{,}000$$

$$\text{Net Working Capital Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Net Working Capital}}$$
$$= \frac{\text{Rs. } 25{,}00{,}000}{\text{Rs. } 5{,}00{,}000}, \textit{ i.e., } 5 \text{ times.}$$

(4) Stock Turnover Ratio

Stock (*i.e.*, finished goods) turnover means the speed with which goods are sold in the business. Stock Turnover Ratio depends upon the purchase

policy and the number of times stock is purchased. Increase in stock may be due to stock requirements of an expanding business or reduction of sales due to various causes. In the latter situation the ratio will decline and it may be a signal for impending danger. Bulk purchasing and purchasing in small lots have their respective advantages and disadvantages but high turnover ratio does not in any case mean that the goods are purchased in small lots. It may be possible that the company is efficient in selling the goods rapidly and hence there may be a high turnover. The ratio is calculated in the following manner :

$$\frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

Cost of Goods Sold = Net Sales – Gross Profit
Or Openings Stock + Net Purchases + Carriage Inwards + Wages – Closing Stock

The average stock figure is calculated by adding the opening stock and the closing stock and dividing it by 2.

The higher the ratio, the better it is, since this indicates that larger sales are being produced by a unit of investment in stock.

Illustration 21. Calculate Stock Turnover Ratio from the following information relating to a limited company :

	Rs.
Cost of Goods Sold	50,000
Stock as on 31.3.1989	15,000
Stock as on 31.3.1990	10,000

Solution :

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

$$\text{Cost of Goods Sold} = \text{Rs. } 50{,}000$$

$$\text{Average Stock} = \frac{\text{Stock as on 31.3.1989 + Stock as on 31.3.1990}}{2}$$

$$= \frac{\text{Rs. } 15{,}000 + \text{Rs. } 10{,}000}{2} = \text{Rs. } 12{,}500$$

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

$$= \frac{\text{Rs. } 50{,}000}{\text{Rs. } 12{,}500}, \quad \textit{i.e.}, \text{ 4 times.}$$

Illustration 22. Calculate Stock Turnover Ratio from the following :

	Rs.
Opening Stock	29,000
Closing Stock	31,000

Sales	3,20,000
Gross Profit	25% on Sales (*Delhi SSCE,1979*)

Solution :

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

$$\text{Cost of Goods Sold} = \text{Sales} - \text{Gross Profit}$$

$$= \text{Rs. } 3,20,000 - \left(\frac{25}{100} \times \text{Rs. } 3,20,000\right)$$

$$= \text{Rs. } 3,20,000 - \text{Rs. } 80,000 = \text{Rs. } 2,40,000$$

$$\text{Average Stock} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

$$= \frac{\text{Rs. } 29,000 + 31,000}{2}$$

$$= \text{Rs. } 30,000$$

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

$$= \frac{\text{Rs. } 2,40,000}{\text{Rs. } 30,000}, \text{ i.e., 8 times.}$$

Illustration 23. Calculate Stock Turnover Ratio from the following Trading Account of a firm for the year ending 31st March, 1989 :

Dr. TRADING ACCOUNT Cr.

	Rs.		Rs.
To Stock (1.4.1988)	50,000	By Sales 5,25,000	
To Purchases	2,40,000	*Less* Sales Returns 25,000	5,00,000
To Carriage	40,000	By Stock (31.3.1989)	30,000
To Wages	1,00,000		
To Gross Profit c/d	1,00,000		
	5,30,000		5,30,000

Solution :

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

$$\text{Cost of Goods Sold} = \text{Net Sales} - \text{Gross Profit}$$

$$= \text{Rs. } 5,00,000 - 1,00,000 = \text{Rs. } 4,00,000$$

$$\text{Average Stock} = \frac{\text{Opening Stock} + \text{Closing Stock}}{2}$$

$$= \frac{\text{Rs. } 50,000 + \text{Rs. } 30,000}{2} = \text{Rs. } 40,000$$

$$\text{Stock Turnover Ratio} = \frac{\text{Rs. } 4{,}00{,}000}{\text{Rs. } 40{,}000}, \text{ i.e., 10 times.}$$

Illustration 24. Calculate Stock Turnover Ratio from the following details :

	Rs.
Opening Stock	37,500
Purchases	1,51,000
Returns Outwards	3,500
Carriage on Purchases	5,000
Wages	42,500
Closing Stock	22,500

Solution :

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Sales}}{\text{Average Stock}}$$

$$\begin{aligned}\text{Cost of Sales} &= \text{Opening Stock} + \text{Net Purchases} \\ &\quad + \text{Carriage on Purchases} + \text{Wages} \\ &\quad - \text{Closing Stock} \\ &= \text{Rs. } 37{,}500 + \text{Rs. } (1{,}51{,}000 - 3{,}500) \\ &\quad + 5{,}000 + 42{,}500 - 22{,}500 \\ &= \text{Rs. } 2{,}10{,}000\end{aligned}$$

$$\begin{aligned}\text{Average Stock} &= \frac{\text{Opening Stock} + \text{Closing Stock}}{2} \\ &= \frac{\text{Rs. } 37{,}500 + \text{Rs. } 22{,}500}{2} = \text{Rs. } 30{,}000\end{aligned}$$

$$\text{Stock Turnover Ratio} = \frac{\text{Rs. } 2{,}10{,}000}{\text{Rs. } 30{,}000}, \text{ i.e., 7 times.}$$

Illustration 25. Determine the amount of gross profit and sales from the following details :

Average Stock	Rs. 80,000
Stock Turnover Ratio	6 times
Selling Price	25% above cost

(All India SSCE, 1984)

Solution :

$$\text{Stock Turnover Ratio} = \frac{\text{Cost of Goods Sold}}{\text{Average Stock}}$$

$$6 = \frac{\text{Cost of Goods Sold}}{\text{Rs. } 80{,}000}$$

$$\text{Cost of Goods Sold} = \text{Rs. } 80{,}000 \times 6 = \text{Rs. } 4{,}80{,}000$$

$$\begin{aligned}\text{Sales} &= \text{Cost of Goods Sold} + \text{Gross Profit} \\ &= \text{Rs. } 4{,}80{,}000 + \left(\frac{25}{100} \times \text{Rs. } 4{,}80{,}000\right) \\ &= \text{Rs. } 4{,}80{,}000 + \text{Rs. } 1{,}20{,}000 = \text{Rs. } 6{,}00{,}000\end{aligned}$$

$$\begin{aligned}\text{Gross Profit} &= (\text{Rs. } 6{,}00{,}000 - \text{Rs. } 4{,}80{,}000) \\ &= \text{Rs. } 1{,}20{,}000.\end{aligned}$$

(5) Debtors (Accounts Receivable) Turnover Ratio

The Current Ratio as well as Quick Ratio presume that accounts receivable or simply receivables (*i.e.*, debtors and bills receivable) can be realised within a reasonable time to allow the payment of current liabilities. The Debtors Turnover Ratio indicates how realistic this assumption is by measuring the average length of time, receivables (*i.e.*, debtors and bills receivable) are held before collection. This ratio is calculated by dividing net credit sales (sales less sales returns) by the average debtors and bills receivable outstanding during the year. Average debtors and bills receivable are calculated by taking the average of the opening and closing debtors and bills receivable. The ratio is calculated as follows :

$$\frac{\text{Net Credit Sales}}{\text{Average Debtors + Average Bills Receivable}}$$

A higher ratio would mean that receivables are being collected efficiently and an important current asset is usefully employed. Firms do not like to have huge sums blocked up in receivables as these funds might be more usefully employed elsewhere.

If bills receivable are not given, Debtors Turnover Ratio may be calculated with the help of average debtors. In that case, this ratio will be calculated as follows :

$$\frac{\text{Net Credit Sales}}{\text{Average Debtors}}$$

Again if the opening balance of debtors is not given, the ratio may be calculated with the help of closing balance of debtors.

Illustration 26. Calculate Debtors' Turnover Ratio from the following details :

	Rs.
Total Sales	3,40,000
Cash Sales	60,000
Opening Debtors	43,000
Closing Debtors	37,000

Solution :

$$\text{Debtors Turnover Ratio} = \frac{\text{Credit Sales}}{\text{Average Debtors}}$$

$$\text{Credit Sales} = \text{Total Sales} - \text{Cash Sales}$$

$$= \text{Rs. } 3{,}40{,}000 - \text{Rs. } 60{,}000 = \text{Rs. } 2{,}80{,}000$$

$$\text{Average Debtors} = \frac{\text{Opening Debtors + Closing Debtors}}{2}$$

$$= \frac{\text{Rs. } 43{,}000 + \text{Rs. } 37{,}000}{2} = \text{Rs. } 40{,}000$$

$$\text{Debtors Turnover Ratio} = \frac{\text{Rs. } 2{,}80{,}000}{\text{Rs. } 40{,}000}, \textit{ i.e.}, 7 \text{ times.}$$

It is better to call Debtors Turnover Ratio as Accounts Receivable Turnover Ratio or simply Receivables Turnover Ratio. Accounts receivable represent the total of debtors and bills receivables on a particular date. In this case, the ratio is calculated as follows :

$$\frac{\text{Net Credit Sales}}{\text{Average Accounts Receivable}}$$

Illustration 27. Calculate the average accounts receivable from the following details :

	1.4.88	31.3.89
Debtors	2,00,000	1,20,000
Bills Receivable	50,000	30,000

Solution :

Average Accounts Receivable = Average Debtors + Average Bills Receivable

$$\text{Average Debtors} = \frac{\text{Opening Debtors} + \text{Closing Debtors}}{2}$$

$$= \frac{\text{Rs. } 2,00,000 + \text{Rs. } 1,20,000}{2} = \text{Rs. } 1,60,000$$

$$\text{Average Bills Receivable} = \frac{\text{Opening Bills Receivable} + \text{Closing Bills Receivable}}{}$$

$$= \frac{\text{Rs. } 50,000 + \text{Rs. } 30,000}{2} = \text{Rs. } 40,000$$

Average Accounts Receivable = Rs. 1,60,000 + Rs. 40,000 = Rs. 2,00,000

Illustration 28. Compute Debtors Turnover Ratio from the following details :

	Rs.
Credit Sales	1,88,000
Returns Inwards	8,000
Average Bills Receivable	33,000
Average Debtors	12,000

Solution :

$$\text{Debtors Turnover Ratio} = \frac{\text{Net Credit Sales}}{\text{Average Bills Receivable} + \text{Average Debtors}}$$

$$= \frac{\text{Rs. } 1,88,000 - \text{Rs. } 8,000}{\text{Rs. } 33,000 + \text{Rs. } 12,000}, \textit{ i.e.}, 4 \text{ times.}$$

Illustration 29. Calculate Debtors' Velocity or Turnover Ratio from the following :

	Rs.
Opening Debtors	35,000
Credit Sales	2,55,000
Cash received from Debtors during the year	2,42,000
Discount allowed to them	18,000
Goods returned by Debtors	5,000

Solution :

$$\text{Debtors Turnover Ratio} = \frac{\text{Net Credit Sales}}{\text{Average Debtors}}$$

$$\text{Average Debtors} = \frac{\text{Opening Debtors + Closing Debtors}}{2}$$

$$\text{Closing Debtors} = \text{Opening Debtors + Credit Sales – Cash received from Debtors – Discount allowed to them – Returns Inwards}$$

$$= \text{Rs. } 35{,}000 + 2{,}50{,}000 - 2{,}42{,}000 - 18{,}000 - 5{,}000$$

$$= \text{Rs. } 20{,}000$$

$$\text{Average Debtors} = \frac{\text{Rs. } 35{,}000 + \text{Rs. } 20{,}000}{2}$$

$$= \text{Rs. } 27{,}500$$

$$\text{Debtors Turnover Ratio} = \frac{\text{Rs. } 2{,}55{,}000 - \text{Rs. } 5{,}000}{\text{Rs. } 27{,}500}, \textit{ i.e.}, 9.09 \text{ times.}$$

(6) Debtors' Ratio or Debt Collection Period

This ratio tells us how many days it takes to collect average accounts receivable (*i.e.*, debtors and bills receivable). It is calculated as under :

$$\frac{\text{Accounts Receivable (Debtors + Bills Receivable)}}{\text{Average daily Credit Sales}}$$

Illustration 30. Calculate Debt Collection Period from the following details :

	Rs.
Average daily Credit Sales	2,000
Average Accounts Receivable	1,00,000

The firm gives 60 days' credit to customers. Comment also on the credit policy of the firm.

Solution :

$$\text{Debt Collection Period} = \frac{\text{Rs. } 1{,}00{,}000}{\text{Rs. } 2{,}000}, \textit{ i.e.}, \text{ 50 days}$$

This debt collection period is favourable as compared to the general credit policy of the firm.

Illustration 31. Find out the Average (or Debt) Collection Period from the information given below :

	Rs.
Credit Sales	3,65,000
Debtors	53,500
Bills Receivable	6,500

Solution :

$$\text{Average Collection Period or Debt Collection Period} = \frac{\text{Debtors + Bills Receivable}}{\text{Average Daily Credit Sales}}$$

$$\text{Average Daily Credit Sales} = \frac{\text{Total Credit Sales}}{365}$$

$$= \frac{\text{Rs. } 3{,}65{,}000}{\text{Rs. } 365} = \text{Rs. } 1{,}000$$

$$\text{Average Collection Period} = \frac{\text{Rs. } 53{,}500 + \text{Rs. } 6{,}500}{\text{Rs. } 1{,}000} = 60 \text{ days}$$

To find out average daily credit sales, it would be better if the total credit sales are divided by the number of working days during the year.

Debtors Turnover Ratio may also be calculated in terms of monthly or weekly credit given to customers.

$$\underset{\text{(Monthly basis)}}{\text{Debtors Turnover Ratio}} = \frac{\text{Average Debtors}}{\text{Credit Sales}} \times 12$$

If opening and closing debtors are not given (to find out average debtors), closing debtors may be taken into account to determine this ratio.

Illustration 32. Calculate Debtors Turnover Ratio (monthly basis) from the following details :

	Rs.
Debtors	20,000
Credit Sales	1,20,000

Solution :

$$\underset{\text{(Monthly basis)}}{\text{Debtors' Turnover Ratio}} = \frac{\text{Debtors}}{\text{Credit Sales}} \times 12$$

$$= \frac{\text{Rs. } 20{,}000}{\text{Rs. } 1{,}20{,}000} \times 12$$

$$= 2 \text{ months}$$

Similarly Debtors' Turnover Ratio may be calculated on weekly basis as follows:

$$\underset{\text{(Weekly basis)}}{\text{Debtors Turnover Ratio}} = \frac{\text{Debtors}}{\text{Credit Sales}} \times 52.$$

Illustration 33. Calculate Debtors' Turnover Ratio (Weekly basis) from the following information :

	Rs.
Opening Debtors	56,000
Closing Debtors	44,000
Credit Sales	2,60,000

Solution :

$$\text{Debtors Turnover Ratio (Weekly basis)} = \frac{\text{Average Debtors}}{\text{Credit Sales}} \times 52$$

$$\text{Average Debtors} = \frac{\text{Rs. } 56{,}000 + \text{Rs. } 44{,}000}{2} = \text{Rs. } 50{,}000$$

$$\text{Debtors Turnover Ratio (Weekly basis)} = \frac{\text{Rs. } 50{,}000}{\text{Rs. } 2{,}60{,}000} \times 52 = 10 \text{ weeks}$$

Illustration 34. The Debtors Turnover Ratio of a firm is 8 times. Which of the following transactions would improve or decrease or have no effect on this ratio assuming other things remaining the same ?

(*i*) Increase in cash sales by Rs. 25,000 ;
(*ii*) Decrease in credit sales by Rs. 50,000 ;
(*iii*) Increase in opening debtors by Rs. 40,000 ;
(*iv*) Decrease in closing debtors by Rs. 10,000.

Solution :

(*i*) Increase in cash sales will have no effect on debtors turnover ratio as this ratio takes into account only credit sales.
(*ii*) Decrease in credit sales will decrease the ratio as there will be decrease in numerator.
(*iii*) Increase in opening debtors will decrease the ratio as this will increase the denominator.
(*iv*) Decrease in closing debtors will decrease the denominator and hence it will increase the ratio.

(7) Creditors Turnover Ratio

It is a ratio between the net credit purchases and the average amount of accounts payable (*i.e.*, creditors and bills payable). It indicates how promptly the debts (creditors and bills payable) are paid during an accounting period, or, how many times these debts are turned over in the credit purchases. A firm having a high creditors turnover ratio (which means that debts are being paid promptly) will have more creditability in the eyes of creditors. The ratio is calculated as follows :

$$\frac{\text{Credit Purchases}}{\text{Average Accounts Payable (Sundry Creditors + Bills Payable)}}$$

If the average of accounts payable (*i.e.*, average of opening and closing creditors and bills payable) cannot be known, closing balances of payables may be used. The higher the ratio, the better it is.

Illustration 35. Calculate Creditors Turnover Ratio from the following particulars :

	Rs.
Credit Purchases	90,000
Opening Accounts Payable	18,000
Closing Accounts Payable	12,000

Solution :

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average Accounts Payable}}$$

$$\text{Average Accounts Payable} = \frac{\text{Rs. } 18{,}000 + \text{Rs. } 12{,}000}{2} = \text{Rs. } 15{,}000$$

$$\text{Creditors Turnover Ratio} = \frac{\text{Rs. } 90{,}000}{\text{Rs. } 15{,}000}, \textit{ i.e.}, 6 \text{ times.}$$

Illustration 36. Calculate opening creditors from the following :

	Rs.
Credit Purchases	1,60,000
Closing Creditors	42,000
Creditors Turnover Ratio	4 times

Solution :

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average Creditors}}$$

$$4 = \frac{\text{Rs. } 1{,}60{,}000}{\text{Average Creditors}}$$

$$\text{Average Creditors} = \frac{\text{Rs. } 1{,}60{,}000}{4} = \text{Rs. } 40{,}000$$

$$\text{Average Creditors} = \frac{\text{Opening Creditors} + \text{Closing Creditors}}{2}$$

$$\text{Rs. } 40{,}000 = \frac{\text{Rs. } 42{,}000 + \text{Closing Creditors}}{2}$$

$$\text{Closing Creditors} = \text{Rs. } 80{,}000 - \text{Rs. } 42{,}000 = \text{Rs. } 38{,}000$$

Illustration 37. A Ltd. intends to supply goods on credit to B Ltd. and C Ltd. The relevant details of these firms for the year ending 31st March, 1989 are as follows :

	B Ltd.	C Ltd.
	Rs.	Rs.
Total Purchases	1,86,000	1,32,000
Cash Purchases	6,000	4,000
Trade Creditors	60,000	32,000

With which company should A Ltd. prefer to deal ?

Solution :

A Ltd. should prefer to deal with the company whose Creditors Turnover Ratio is higher as this implies that that company is discharging its debts more promptly.

$$\text{Creditors Turnover Ratio} = \frac{\text{Credit Purchases}}{\text{Average Creditors}}$$

$$\begin{array}{ccc} & \textit{B Ltd.} & \textit{C Ltd.} \\ = & \dfrac{\text{Rs. }1{,}86{,}000 - \text{Rs. }6{,}000}{\text{Rs. }60{,}000} & \dfrac{\text{Rs. }1{,}32{,}000 - \text{Rs. }4{,}000}{\text{Rs. }32{,}000} \\ = & 3 \text{ times} & 4 \text{ times} \end{array}$$

A Ltd. should prefer to deal with C Ltd. as its Creditors Turnover Ratio is higher as compared to that of B Ltd.

(8) Creditors Ratio or Debt Payment Period

This ratio indicates how many days it takes to pay average accounts payable (*i.e.*, creditors and bills payable). It is calculated as follows :

$$\frac{\text{Average Accounts Payable (Sundry Creditors + Bills Payable)}}{\text{Average daily Credit Purchases}}$$

Illustration 38. Calculate Creditors Ratio or Debt Payment Period from the following details :

	Rs.
Average daily Credit Purchases	5,000
Creditors	2,62,000
Bills Payable	38,000

Solution :

$$\text{Creditors Ratio} = \frac{\text{Average Accounts Payable}}{\text{Average daily Credit Purchases}}$$

$$= \frac{\text{Rs. }2{,}62{,}000 + \text{Rs. }38{,}000}{\text{Rs. }5{,}000}$$

$$= 60 \text{ days}$$

The Creditors Turnover or Velocity may be expressed in terms of days', weeks' or months' credit which the outstanding purchases represent. It is calculated as under:

(*i*) Creditors Turnover : Daily basis $= \dfrac{\text{Accounts Payable}}{\text{Credit Purchases}} \times 365$

Weekly basis $= \dfrac{\text{Accounts Payable}}{\text{Credit Purchases}} \times 52$

Monthly basis $= \dfrac{\text{Accounts Payable}}{\text{Credit Purchases}} \times 12$

PROFITABILITY RATIOS

Profit is the *raison d' etre* of a business. A business in the long term can survive only if it makes some profit. Profit is also a measure of the efficiency of the business. It also generates funds which provide life blood to the business and for achieving many other objectives. It is also needed for paying dividends to the shareholders and for attracting additional investment and providing resources for growth and paying off long-term liabilities.

The profitability of a firm can be reliably analysed with the help of profitability ratios. These ratios are of particular interest to the owners and the management. Long-term creditors are also interested in the profitability of the business concern.

The fundamental purpose of profitability ratios is to throw light on the income generating capacity of an undertaking.

Profitability ratios can be ascertained on the basis of—

(1) Sales, or

(2) Investments

Profitability ratios based on sales include—

(*a*) Gross Profit Ratio,

(*b*) Net Profit Ratio, and

(*c*) Operating Profit Ratio.

Profitability ratios based on investments are—

(*a*) Return on Assets,

(*b*) Return on Capital Employed, and

(*c*) Return on Shareholders' Equity.

These ratios are now considered.

(1) Profitability Ratios based on Sales

The ratios which are calculated from the figures of Trading and Profit and Loss Account of a company are known as profitability ratios based on sales. These are of various kinds and some of them are described below :

(*a*) **Gross Profit Ratio.** This ratio is also known as the *Gross Profit to Sales Ratio* or the Gross Profit Percentage. This ratio indicates the average margin obtained on goods sold. It is an average and it does not represent the margin on individual products which may widely differ from the average. It is calculated as under :

$$\frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

This ratio is expressed in the percentage form.

Minor changes in the ratio from year to year may be ignored and it may be taken to mean that there is nothing wrong on the operational front. However, any big change in the ratio must be investigated because the change may be due to a change in the accounting methods. This ratio is most useful

in those businesses where there is a fixed mark up. Any departure from the standard mark up would indicate losses on account of theft, damage, bad stock system, bad sales policy and other such reasons. This is a good method of keeping stock-inventory control. It is desirable that this ratio must be high and steady because any fall in it would put the management in difficulty in the realisation of fixed overhead expenses of the business.

Illustration 39. The following is the summarised Profit and Loss Statement of Zenith Limited for the year ending 31st March, 1989 :

	Rs.
Gross Sales	3,03,00,000
Less Returns & Allowances	3,00,000
Net Sales	3,00,00,000
Less Cost of Sales	1,80,00,000
Gross Profit	1,20,00,000
Operating Expenses	78,00,000
Operating Profit	42,00,000
Interest	2,00,000
Income before Taxes	40,00,000
Provision for Taxes	20,00,000
Net Income	20,00,000

Calculate Gross Profit Ratio.

Solution :

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

$$= \frac{1,20,00,000}{3,00,00,000} \times 100 = 40\%.$$

Illustration 40. State the effect of each of the following transactions (assuming other things remaining the same) on Gross Profit Ratio :

(*i*) Increase in selling price per unit
(*ii*) Increase in Cost of Sales
(*iii*) Increase in Closing Stock
(*iv*) Decrease in Opening Stock
(*v*) Increase in Carriage Outwards.

Solution :

Any increase on the credit side of Trading Account will improve this ratio and *vice versa.*

(*i*) Increase in selling price per unit will improve this ratio. For example, let us say the amounts of gross profit and sales are Rs. 1,00,000 and Rs. 4,00,000 respectively, and the gross profit ratio is 25%. If due to

increase in selling price, the sales, say, go up by Rs. 1,00,000, the revised figure of Sales will be Rs. 5,00,000 and that of gross profit Rs. 2,00,000. Hence the ratio becomes 40%.

(*ii*) Increase on the debit side of the Trading Account (increase in cost of sales) will reduce the amount of gross profit. Hence the ratio will decline.

(*iii*) Increase on the credit side of the Trading Account (increase in closing stock) will increase the amount of gross profit and hence the ratio will improve.

(*iv*) Decrease in opening stock will leave more amount for gross profit and hence the ratio will improve.

(*v*) Carriage outwards is an item of selling expense. It appears on the debit side of profit and loss account. So, it will not affect gross profit ratio.

(*b*) **Net Profit Ratio.** This ratio is also known as *Margin or Net Income Percentage*. It measures the rate of net profit earned on sales. This is an overall measurement of profitability. This ratio is calculated as follows :

$$\frac{\text{Net Operating Profit}}{\text{Sales}} \times 100.$$

In Illustration 39 on page 44

Net Operating Profit = Net Sales – Cost of Goods Sold – Administrative and Selling Expenses – Interest – Non-recurring items.

$$\text{Net Profit Ratio} = \frac{40,00,000}{3,00,00,000} \times 100 = 13.33\%$$

Some people calculate this ratio on the basis of net profit after deducting the tax payable, but this is not the usual practice in India. According to this method, the Net Income Ratio or Operating Profit Ratio in Illustration 39, will work out as follows :

$$\frac{20,00,000}{3,00,00,000} \times 100 = 6.7\%.$$

This ratio is considered by some to be an important single measure of the efficiency or performance of a business. This ratio however does not take into account the capital invested in earning the income. This point will be clear from the example given below :

Example. There are two different companies : one of them is capital-oriented whereas the other is not. Their operating results upto 31st March, 1989 are summarised hereunder :

	Company A	*Company B*
	Rs.	Rs.
Sales	1,00,00,000	1,00,00,000
Net Profit	1,00,000	10,00,000
Total Investment	5,00,000	50,00,000

	Company A	Company B
Net Profit Ratio	$\frac{1,00,000 \times 100}{1,00,00,000}$ = 1%	$\frac{10,00,000 \times 100}{1,00,00,000}$ = 10%

The Net Profit Ratio in Company B is ten times the ratio in Company A. This Ratio however fails to explain the real situations because the return on investment in both the cases is the same, *i.e.*, 20%. This simply means that a company with limited investment can easily earn good return over its investment with a low margin of profit even.

Illustration 41. From the following information, calculate the Net Profit Ratio :

Gross Profit Ratio	40%
Gross Profit	Rs. 1,20,000
Office, Selling and Administrative Expenses	Rs. 90,000

Solution :

$$\text{Gross Profit Ratio} = \frac{\text{Gross Profit}}{\text{Net Sales}} \times 100$$

$$40 = \frac{\text{Rs. } 1,20,000}{\text{Net Sales}} \times 100$$

$$\text{Net Sales} = \frac{\text{Rs. } 1,20,000 \times 100}{40} = \text{Rs. } 3,00,000$$

$$\text{Net Profit} = \text{Gross Profit} - \text{Expenses}$$

$$= \text{Rs. } 1,20,000 - \text{Rs. } 90,000 = \text{Rs. } 30,000$$

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

$$= \frac{\text{Rs. } 30,000}{\text{Rs. } 3,00,000} \times 100 = 10\%$$

Illustration 42. Calculate Net Profit Ratio and Operating Net Profit Ratio from the following information relating to Sunny Limited.

		Rs.
Sales		5,00,000
Cost of Goods Sold		3,20,000
Operating Expenses		80,000
Financial Expenses		
Interest on Debentures	32,000	
Interest on Bank Loan	18,000	50,000
Dividend Received		25,000

Solution :

$$\text{Net Profit Ratio} = \frac{\text{Net Profit}}{\text{Net Sales}} \times 100$$

Net Profit = Sales – Cost of Goods Sold – Operating Expenses – Financial Expenses + Dividend Received
= Rs. 5,00,000 – Rs. 3,20,000 – Rs. 80,000 – Rs. 50,000 + Rs. 25,000
= Rs. 75,000

$$\text{Net Profit Ratio} = \frac{\text{Rs. } 75{,}000}{\text{Rs. } 5{,}00{,}000} \times 100$$

= 15%

$$\text{Operating Net Profit Ratio} = \frac{\text{Operating Net Profit}}{\text{Net Sales}} \times 100$$

Operating Net Profit = Net Profit + Financial Expenses – Dividend Received

= Rs. 75,000 + Rs. 50,000 – Rs. 25,000

= Rs. 1,00,000

$$\text{Operating Net Profit Ratio} = \frac{\text{Rs. } 1{,}00{,}000}{\text{Rs. } 5{,}00{,}000} \times 100$$

= 20%

Expenses Ratios. These ratios are a variant of profitability ratios and are related to sales. These are computed by dividing expenses by sales. Some of the expenses ratios are as follows :

(*c*) **Operating Ratio.** This is the ratio by which we measure generally the cost of goods for making the sale. Operating expenses include all the expenses except financial expenses such as interest, etc. This ratio is calculated as under :

$$\frac{\text{Cost of Goods Sold + Operating Expenses}}{\text{Net Sales}} \times 100$$

In Illustration 39 on page 44, Operating Ratio is :

$$\frac{\text{Rs. } 1{,}80{,}00{,}000 + \text{Rs. } 78{,}00{,}000}{\text{Rs. } 3{,}00{,}00{,}000} \times 100 = \frac{\text{Rs. } 2{,}58{,}00{,}000}{\text{Rs. } 3{,}00{,}00{,}000} \times 100 = 86\%$$

Operating Ratio (86) plus Net Profit Ratio (14) is always equal to 100. An increase in Operating Ratio means a fall in net profit. Obviously the lower it is, the better it is.

Operating ratio may be analysed further to ascertain operational efficiency in different aspects of the work of manufacturing and sale. The break-ups of the operating ratio are as follows :

(*i*) *Materials Consumed Ratio.* This ratio takes into account the materials consumed and is worked out as follows :

$$\text{Materials Consumed Ratio} = \frac{\text{Materials Consumed}}{\text{Net Sales}} \times 100$$

Suppose in Illustration 39 (on page 44), the break-up of cost of goods sold is as under :

		Rs.
Materials consumed	=	1,40,00,000
Manufacturing expenses	=	40,00,000
Total	=	1,80,00,000

Now, the Material Consumed Ratio is

$$\frac{\text{Rs. } 1{,}40{,}00{,}000}{\text{Rs. } 3{,}00{,}00{,}000} \times 100 = 46.67\%$$

(*ii*) *Conversion Cost or Manufacturing Expenses Ratio.* This ratio takes into account only the manufacturing cost without including cost of material consumed.

$$\text{Manufacturing Expenses Ratio} = \frac{\text{Manufacturing Expenses}}{\text{Sales}} \times 100$$

In Illustration 39 (on page 44), Manufacturing Expenses Ratio is

$$= \frac{\text{Rs. } 40{,}00{,}000}{\text{Rs. } 3{,}00{,}00{,}000} \times 100 = 13.33\%$$

(*iii*) *Administrative Expenses Ratio.* Administrative Expenses are incurred for the maintenance of office and administrative set-up of the business.

$$\text{Administrative Expenses Ratio} = \frac{\text{Administrative Expenses}}{\text{Net Sales}} \times 100$$

Let us say Operating Expenses of Rs. 78,00,000 comprise of —

Administrative Expenses = Rs. 21,00,000

Selling Expenses = Rs. 57,00,000

Now, the Administrative Expenses Ratio will be :

$$\frac{\text{Rs. } 21{,}00{,}000}{\text{Rs. } 3{,}00{,}00{,}000} \times 100 = 7\%$$

(*iv*) *Selling Expenses Ratio.* This is the ratio which is mainly concerned with the selling expenses incurred by a concern to achieve the sales target. Selling expenses may be sub-divided into current expenses and long-term expenses. For example company A wants to introduce a new product into

the market and for this purpose it has chalked out an extensive programme of advertisement including free sample distribution. Suppose the amount spent by the company for such a project is to the tune of Rs. 4 lakhs. The company proposes to write off this expense in four years. Hence, this year we will include only Rs. 1 lakh in current expenses and the rest will be carried over in the Balance Sheet to be written off in subsequent three years. While calculating Selling Expenses Ratio, we deduct such long-term expenses. The ratio can be calculated as under :

$$\text{Selling Expenses Ratio} = \frac{\text{Current Selling Expenses}}{\text{Net Sales}} \times 100$$

In Illustration 39 (on page 44), Selling Expenses Ratio will be :

$$\frac{\text{Rs. } 57{,}00{,}000 - \text{Rs. } 3{,}00{,}000}{3{,}00{,}00{,}000} \times 100 = \frac{54{,}00{,}000}{3{,}00{,}00{,}000} \times 100 = 18\%.$$

This ratio helps in controlling wastage in selling expenses. The lower the percentage of this ratio, the more advantageous it will be for the concern.

Illustration 43. From the following Trading and Profit and Loss Account of AB Ltd. for the year ending 31st March, 1989, calculate :

(1) Administrative Expenses Ratio ;
(2) Selling and Distribution Expenses Ratio ;
(3) Finance Expenses Ratio ;
(4) Non-operating Expenses Ratio ;
(5) Gross Profit Ratio ;
(6) Net Profit Ratio ;
(7) Operating Net Profit Ratio ;
(8) Operating Ratio.

Dr. TRADING AND PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Stock (1.4.1988)	15,000	By Sales *less* Returns	1,00,000
To Purchases *less* Returns	60,000	By Stock (31.3.1989)	20,000
To Carriage & Freight	1,000		
To Wages	4,000		
To Gross Profit c/d	40,000		
	1,20,000		1,20,000
To Administrative Expenses	20,000	By Gross Profit b/d	40,000
To Selling & Distribution Expenses	2,500	By Non-operating Incomes	5,000
To Finance Expenses	1,500		
To Other Non-operating Expenses	1,000		
To Net Profit	20,000		
	45,000		45,000

Solution :

1. Administrative Expenses Ratio

$$= \frac{\text{Administrative Expenses}}{\text{Sales}} \times 100 = \frac{20,000}{1,00,000} \times 100 = 20\%$$

2. Selling and Distribution Expenses Ratio

$$= \frac{\text{Selling + Distribution Expenses}}{\text{Sales}} \times 100$$

$$= \frac{2,500}{1,00,000} \times 100 = 2.5\%$$

3. Finance Expenses Ratio

$$= \frac{\text{Finance Expenses}}{\text{Sales}} \times 100 = \frac{1,500}{1,00,000} \times 100 = 1.5\%$$

4. Non-operating Expenses Ratio

$$= \frac{\text{Finance Expenses + Other Non-operating Expenses}}{\text{Sales}} \times 100$$

$$= \frac{1,000 + 1,500}{1,00,000} \times 100 = 2.5\%$$

5. Gross Profit Ratio

$$= \frac{\text{Gross Profit}}{\text{Sales}} \times 100 = \frac{40,000}{1,00,000} \times 100 = 40\%$$

6. Net Profit Ratio

$$= \frac{\text{Net Profit}}{\text{Sales}} \times 100 = \frac{20,000}{1,00,000} \times 100 = 20\%$$

7. Operating Net Profit Ratio

$$= \frac{\text{Operating Net Profit}}{\text{Sales}} \times 100$$

$$= \frac{20,000 - 5,000 + 1,500 + 1,000}{1,00,000} \times 100$$

$$= \frac{17,500}{1,00,000} \times 100 = 17.5\%$$

8. Operating Ratio

$$= \frac{\text{Cost of Goods Sold + Operating Expenses}}{\text{Sales}} \times 100$$

$$= \frac{60,000 + 22,500}{1,00,000} \times 100 = \frac{82,500}{1,00,000} \times 100 = 82.5\%$$

(2) Profitability Ratios based on Investments

These ratios are also known as *overall profitability ratios*. These ratios include :

(*a*) **Return on Capital Employed Ratio.** With the help of the profitability ratios discussed above we can measure various aspects of profitability of a company. But the equity shareholders of the company are mainly interested in overall profitability of the company. The overall profitability is also known as *Rate of Return* or *Net Profit to Capital Employed Ratio.* To understand this ratio the meaning of *capital employed* and the *net profit earned* must be clearly understood.

Capital Employed. It means net fixed assets plus net working capital, (*i.e.*, current assets less current liabilities). In terms of liabilities, capital employed means the share capital including preference shares, reserves, unappropriated profits and long-term loans like debentures less any non-trading and fictitious assets like Profit and Loss Account (Dr. Balance), Preliminary Expenses, Underwriting Commission, Discount on Issue of Shares and Debentures.

Net Profit. This generally means operating profit before deducting interest, tax and dividends. However, some experts calculate net profit after deducting tax from operating profit but interest and dividend is not deducted.

The ratio calculated on the basis of the above two variables is known as *Return on Capital employed.* It is calculated as under :

$$(a)\quad \frac{\text{Net Profit before Tax, Interest and Dividend}}{\text{Net Fixed Assets + Net Working Capital}} \times 100, \text{ or}$$

$$(b)\quad \frac{\text{Net profit after Tax but before Interest and Dividend}}{\text{Net Fixed Assets + Net Working Capital}} \times 100$$

This ratio measures profitability of total capital employed in the business. It also throws light on the efficiency of the management.

Illustration 44. Calculate the amount of capital employed from assets side as well as liabilities side from the Balance Sheet given below :

Liabilities	Rs.	*Assets*	Rs.
Equity Share Capital	3,60,000	Land and Buildings (Net)	2,50,000
Preference Share Capital	1,20,000	Plant and Machinery (Net)	3,00,000
General Reserve	1,60,000	Furniture and Fittings (Net)	50,000
Profit and Loss Account	80,000	Investments (Non-trading)	50,000
Debentures	1,00,000	Stock	2,00,000
Sundry Creditors	1,80,000	Sundry Debtors	1,50,000
Bills Payable	96,000	Cash at Bank	1,00,000
Tax Payable	80,000	Cash in Hand	40,000
Outstanding Expenses	24,000	Bills Receivable	45,000
		Prepaid Expenses	5,000
		Preliminary Expenses	10,000
	12,00,000		12,00,000

Solution :

Capital Employed (Assets side) = Net Fixed Assets + Net Working Capital

Net Fixed Assets	=	Land and Buildings + Plant and Machinery + Furniture and Fittings
	=	Rs. 2,50,000 + Rs. 3,00,000 + Rs. 50,000
	=	Rs. 6,00,000
Net Working Capital	=	Current Assets – Current Liabilities
Current Assets	=	Stock + Sundry Debtors + Cash at Bank + Cash in Hand + Bills Receivable + Prepaid Expenses
	=	Rs. 2,00,000 + Rs. 1,50,000 + Rs. 1,00,000 + Rs. 40,000 + Rs. 45,000 + Rs. 5,000
	=	Rs. 5,40,000
Current Liabilities	=	Sundry Creditors + Bills Payable + Tax Payable + Outstanding Expenses
	=	Rs. 1,80,000 + Rs. 96,000 + Rs. 80,000 + Rs. 24,000
	=	Rs. 3,80,000
Net Working Capital	=	Current Assets – Current Liabilities
	=	Rs. 5,40,000 – Rs. 3,80,000
	=	Rs. 1,60,000
Capital Employed	=	Net Fixed Assets + Net Working Capital
	=	Rs. 6,00,000 + Rs. 1,60,000
	=	Rs. 7,60,000
Capital Employed (Liabilities side)	=	Share Capital (Equity and Preference) + Reserves + Unappropriated Profits + Debentures and other Long Term Loans – Non-trading and Fictitious Assets
	=	Equity Share Capital + Preference Share Capital + General Reserve + Profit and Loss Account + Debentures – Non Trading Investments – Preliminary Expenses
	=	Rs. 3,60,000 + Rs. 1,20,000 + Rs. 1,60,000 + Rs. 80,000 + Rs. 1,00,000 – Rs. 50,000 – Rs. 10,000
	=	Rs. 7,60,000

Illustration 45. You are required to calculate Return on Capital Employed from the following :

	Rs.
Net Profit after Tax	2,00,000
Rate of Income Tax	50%
4,000 10% Convertible Debentures of Rs. 100 each, fully paid up	4,00,000
Current Assets	4,30,000
Current Liabilities	2,30,000
Fixed Assets (at cost)	9,70,000
Depreciation upto date	1,70,000

Solution :

$$\text{Return on Capital Employed} = \frac{\text{Net Profit before Tax, Interest \& Dividend}}{\text{Net Fixed Assets + Net Working Capital}} \times 100$$

(i) Net profit before Tax $= \text{Rs. } 2,00,000 \times \frac{100}{50} = \text{Rs. } 4,00,000$

Interest on Debentures $= \frac{10}{100} \times \text{Rs. } 4,00,000 = \text{Rs. } 40,000$

Net profit before Tax and Interest $= \text{Rs. } 4,00,000 + \text{Rs. } 40,000$

$= \text{Rs. } 4,40,000$

(ii) Net Assets = Fixed Assets − Depreciation

= Rs. 9,70,000 − Rs. 1,70,000

= Rs. 8,00,000

(iii) Net Working Capital = Current Assets − Current Liabilities

= Rs. 4,30,000 − Rs. 2,30,000

= Rs. 2,00,000

$$\text{Return on Capital Employed Ratio} = \frac{\text{Rs. } 4,40,000}{\text{Rs. } 8,00,000 + \text{Rs. } 2,00,000} \times 100$$

$= 44\%$

Illustration 46. Calculate Return on Capital Employed from the following information :

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Operating Expenses	1,00,000	By Gross Profit b/d	3,00,000
To Non-operating Expenses: 14% Interest on Rs. 2,00,000 Debentures	28,000		
To Provision for Tax	86,000		
To Net Profit	86,000		
	3,00,000		3,00,000

Additional information :

(i) 30,000 equity shares of Rs. 10 each fully paid up.
(ii) 2,000 14% Debentures of Rs. 100 each fully paid up.
(iii) Share Premium Balance Rs. 1,20,000.
(iv) General Reserve Balance Rs. 1,80,000.

Solution :

$$\text{Return on Capital Employed} = \frac{\text{Net Profit before Interest, Tax \& Dividends}}{\text{Share Capital (Equity and Preference)} + \text{Reserves and Surplus} + \text{Long-term Loans} - \text{Non-trading Assets} - \text{Fictitious Assets}} \times 100$$

Net before Interest and Tax = Rs. 86,000 + Rs. 86,000 + Rs. 28,000
= Rs. 2,00,000

Capital Employed = Equity Share Capital + Share Premium + General Reserve + Debentures
= Rs. 3,00,000 + Rs. 2,00,000 + Rs. 1,20,000 + Rs. 1,80,000
= Rs. 8,00,000

$$\text{Return on Capital Employed} = \frac{\text{Rs. } 2,00,000}{\text{Rs. } 8,00,000} \times 100$$
$$= 25\%$$

Illustration 47. Calculate Net Profit for the purposes of Return on Capital Employed Ratio from the following details :

Dr. PROFIT AND LOSS ACCOUNT *Cr.*

	Rs.		Rs.
To Office and Administrative Expenses	2,00,000	By Gross Profit b/d	8,00,000
To Selling and Distribution Expenses	1,60,000		
To Interest on Debentures	40,000		
To Provision for Tax	2,00,000		
To Net Profit	2,00,000		
	8,00,000		8,00,000

Solution :

Net Profit before Interest and Tax = Net Profit after Tax + Provision for Tax + Interest on Debentures
= Rs. 2,00,000 + Rs. 2,00,000 + Rs. 40,000
= Rs. 4,40,000

(*b*) Return on Equity or Net Worth. The shareholders are generally interested in knowing the net worth of the business and return on net worth. Return on Equity or Net Worth Ratio clearly measures the business success and managerial efficiency. It is calculated as under :

Return on Equity Capital :

$$= \frac{\text{Net profit after Interest, Tax and Dividend}}{\text{Equity Capital + Reserves}} \times 100$$

Illustration 48. Compute Net Profit for the purposes of Return on Equity from the following :

Dr. PROFIT AND LOSS ACCOUNT **Cr.**

	Rs.		Rs.
To Office and Administrative Expenses	1,50,000	By Gross profit b/d	6,00,000
To Selling and Distribution Expenses	1,25,000		
To Interest on Bank Loan	25,000		
To Net Profit (Subject to Tax @ 50%)	3,00,000		
	6,00,000		6,00,000

Provide 10% dividend on Rs. 5,00,000 Equity Capital divided into 50,000 shares of Rs. 10 each, fully paid up.

Solution :

Net Profit after Interest, Tax and Dividend = Net Profit before Tax – Provision for Tax – Proposed Dividend
= Rs. 3,00,000 – Rs. 1,50,000 – Rs. 50,000
= Rs. 1,00,000.

OVER-ALL MEASURES OF RATIOS

These ratios are known as *composite* or *complex ratios*. They generally depend upon the Balance Sheet figures and Income Statement figures, *i.e.*, the figures of Profit and Loss Account including the figures of Trading Account. The most important of these ratios are the following :

(*a*) **Return on Investment.** Return on investment is defined to be net income divided by investment. It can be expressed in many ways. From the point of view of the shareholders, it is the return on their investment and is calculated as under :

$$\frac{\text{Net Profit (after Interest and Tax)}}{\text{Share Capital (both Preference and Equity)}} \times 100$$

Another version of this ratio is known as *Tangible Net Worth* and is calculated as under :

$$\frac{\text{Net Profit (after Interest and Tax)}}{\text{Average Net Worth} - \text{Average Intangibles}} \times 100$$

Average Net Worth means average of the net worth as at the beginning of the period and as at the end of the period. Likewise Average Intangibles (*i.e.*, intangible assets) means average of the intangible assets as at beginning of the period and as at the end of the period.

There is yet another method for calculating return on investment. Under this method two subsidiary ratios are calculated first. These ratios are :

(*i*) *Investments Turnover* = $\dfrac{\text{Sales}}{\text{Equity Capital + Fixed Liabilities}}$

(*ii*) *Operating Profit Ratio* = $\frac{\text{Operating Profit}}{\text{Sales}} \times 100$

With the help of these subsidiary ratios, the return on investment is calculated as under :

Return on Investment = Investment Turnover x Operating Profit Ratio.

The above method is considered to be more useful for judging the overall performance of a business. It clearly indicates that the performance of the business can either be improved by increasing the sales per rupee of capital employed (*i.e.*, investment turnover) or by increasing the margin of profit on sales (*i.e.*, operating profit ratio).

LIMITATIONS OF RATIO ANALYSIS

It must be clear by now that ratio analysis is an important technique to judge the operational efficiency or performance and financial position of a business undertaking. It also helps us in planning future growth of the business undertaking. This can be done by way of comparison which may be :

(a) for the same firm over a period of years,
(b) for one firm against another,
(c) for one firm against the industry as a whole or against predetermined standards, and
(d) for one department or division of the firm against another department or division of the firm.

On the basis of the accounting ratios it is possible to carry out inter-firm and intra-firm comparisons easily. These ratios not only tell the present situation or position but also the causes leading to that situation or position. Not only that they also portray the trend of the change. They also help in the preparation of future estimates.

Inspite of all the above advantages, the technique of ratio analysis cannot be used blindly because it has certain inherent limitations which must always be borne in mind. These limitations are as follows :

1. *Reliability of basic data*. Every accounting equation is based on certain basic data which are obtained generally from the financial statements of a business. The ratios can in no case be more reliable than the basic data upon which they are based. If the value of stock is inflated, the profitability ratios will be inflated. Not only that financial position will also appear to be better.

2. *Differences in accounting methods*. When ratios of two firms are compared we must be very careful about the accounting methods followed by them. The different accounting methods will adversely affect the comparability of the ratios. For example, if one firm values its stock on 'Lifo' (last in, first out) method and the other on 'Fifo' (first in, first out) method, the profitability ratios of the two firms will lose their comparability value to a great extent.

3. *Changes in price-level.* The value of currency keeps on changing due to various reasons which are beyond the control of a business concern. An increase or decrease in supply of money affects the price-level. The resultant changes in price-level make the comparison of ratios of one year to another useless. The ratio of sales to fixed assets (valued at cost less depreciation) will be much higher in 1989 as compared to the ratio of 1980. The cause is obvious, *i.e.*, the rise in prices.

4. *Multiplicity of ratios.* From the same set of figures many ratios can be computed but all of them are not equally significant. Hence, out of various possible ratios only significant ratios should be computed and compared.

5. *Absolute figures must not be ignored.* Ratios alone sometimes present very misleading picture. For example, Company A has produced 6,000 units as against 2,000 units in the last year and Company B has produced 1,00,000 units as against 80,000 units in the last year. There is an increase in production of 200% in case of Company A and 25% in case of Company B. The two ratios of 200% and 25% increase in production are misleading unless absolute figures are also compared.

6. *Ratios are clues only.* The ratio analysis is based on past performance. We are concerned more with the present and the future and hence with the help of the ratios we must carry out our analysis and investigations further to come to valid conclusions.

Bearing in mind the various limitations of ratio analysis the following precautions must be taken :

(*a*) Ratios for a firm will be meaningful only if they are compared continuously over a number of years. A time series of ratios is most desirable. Changes in accounting methods must always be taken into account and the figures be reduced to a common base before computation of the ratios.

(*b*) Since all performance areas of a business are interlinked, ratios must be studied against a comprehensive background and not in isolation.

(*c*) The financial ratios are important in the final analysis, but they are concerned with only say one-ninth of the iceberg ; the visible tip of business as it were. What goes on within the invisible eight-ninths may only be revealed through internal cost and other technical records that provide detailed ratios regarding-technical and/or physical performance. To draw valid conclusions, they must always be kept in mind.

TEST QUESTIONS

1. Explain the importance of the analysis of financial statements.

(*All India SSCE , 1985*)

2. What points should be taken care of while drawing conclusions from the financial statements of a joint stock company ?

3. (*a*) What do you mean by Accounting Ratios ? How are they useful ?
(*Delhi SSCE , 1989*)

(*b*) Mention the important ratios which are useful for measuring the profitability of a concern. Illustrate your answer with suitable examples.

4. Explain the advantages and limitations of accounting ratios.
(*Delhi SSCE. 1989*)

5. A trader wants your opinion about the purpose and method of computation of the following ratios : (*i*) Stock Turnover Ratio, (*ii*) Net Operating Ratio, (*iii*) Expenses Ratio.

You are required to submit a note for the purpose.

6. What are the important points to be taken into account while selecting suitable ratios ?

7. What are the various kinds of ratios ? What is the purpose of profitability ratios, liquidity ratios and solvency ratios ?

8. The Accounting Ratios are very important for interpretation as they give valuable and very useful information about the business, its profitability, its ability to honour its monetary commitments, its working efficiency and so on. Discuss the ratios which are generally used, while interpreting financial statements.

9. State the purpose and mode of determining the following ratios : (*i*) Inventory Ratio, (*ii*) Debtors Ratio, (*iii*) Operating Ratio.

10. At March 31, 1989, a company's current ratio was 2.4 : 1. What does this indicate to management ?

11. Classify the financial ratios on the basis of their dependence on financial statements.
(*Delhi SSCE, 1988*)

12. Explain in brief the ratios you would use for the purpose of evaluating long-term solvency of a firm to pay its long-term debts. (*Delhi SSCE, 1985*)

13. Make a distinction between Liquidity Ratio and Current Ratio.
(*All India SSCE, 1979*)

14. Why is Liquidity Ratio considered to be more dependable than Current Ratio ? Specify.
(*Delhi SSCE , 1988*)

15. Explain with suitable illustrations the following accounting ratios :

(*i*) Current Ratio.

(*ii*) Net Profit Ratio.

What do these ratios indicate ? (*Delhi SSCE, 1982*)

16. What are current Assets ?

Describe the method of determining and the significance of any three of the following ratios :

(i) Liquidity Ratio.

(ii) Debt-Equity Ratio.

(iii) Inventory-Turnover Ratio.

(iv) Debtors' Turnover Ratio. *(Delhi SSCE, 1984)*

17. Explain in about 50 words each, the importance of the following accounting ratios :

(i) Proprietary Ratio. *(All India SSCE, 1989)*

(ii) Debt-Equity Ratio. *(All India SSCE, 1989, Delhi SSCE, 1989)*

(iii) Expense Ratios. *(Delhi SSCE, 1986)*

(iv) Net Profit Ratio. *(Delhi SSCE, 1986)*

18. State the procedure and purpose of determining the following ratios :

(i) Debtors Turnover,

(ii) Creditors Turnover,

(iii) Stock Turnover, and

(iv) Working Capital Turnover. *(Delhi SSCE , 1985)*

19. Write short notes, giving suitable illustrations, on :

(i) Proprietory Ratio. *(All India SSCE, 1981)*

(ii) Gross Profit Ratio. *(All India SSCE, 1981, 1986)*

20. (i) How would you determine whether an asset is a current asset or a non-current asset ?

(ii) What is a Current Ratio ? What does it indicate ?

(iii) How do you compute 'Stock Turnover Ratio' ? What does it indicate ?

(iv) What is an Operating Ratio ? How do you calculate it ? What is its importance ?

(v) Illustrate the method of determining Debtors' Turnover Ratio ? What does it indicate ? *(All India SSCE, 1986)*

21. Write notes on any three of the following :

(i) Liquidity Ratio. *(All India SSCE 1980, 1979; Delhi SSCE 1982)*

(ii) Profitability Ratio. *(All India SSCE 1979 ;Delhi SSCE 1982)*

(iii) Inventory Turnover Ratio. *(Delhi SSCE 1989, 1984, 1982)*

(iv) Debt-Equity Ratio? *(All India SSCE, 1989, 1986 ; Delhi SSCE, 1984)*

(v) Operating Ratio. *(All India SSCE, 1986 ; Delhi SSCE, 1984)*

(vi) Current Ratio. *(Delhi SSCE, 1989)*

22. State the effect of the following on Current Ratio and Liquidity Ratio :

(a) Payment to a supplier.

(*b*) **Sale of goods for cash at normal profit.**

(*c*) **Sale of investment.**

(*d*) **Purchase of machinery on hire-purchase system—instalments are to be paid off half yearly.**

(*e*) **Purchase of goods for cash.**

23. Write short notes on :

(*a*) **Reliability of the Balance Sheet figures.**

(*b*) **Future Prospects of a business.**

(*c*) **Absolute Comparison.**

(*d*) **Relative Comparison.**

24. Current liabilities of a company are Rs. 1,50,000. Its current ratio is 3 :1 and acid test ratio (liquid ratio) is 1 :1. Calculate the values of current assets, liquid assets and stock.

25. (*a*) **A firm has a current ratio of 3 : 1. Its net working capital is Rs. 20,000. You are required to determine (*i*) current assets, (*ii*) current liabilities, and (*iii*) liquid assets assuming inventory of Rs. 22,000.** (*Delhi SSCE ,1985*)

(*b*) Current Ratio 2.5; Working Capital Rs. 60,000. Calculate the amount of current assets and current liabilities. (*Delhi SSCE, 1979*)

PRACTICAL EXERCISES

1. At 31st March, 1989 the current assets of a concern were Rs. 5,00,000 and its current liabilities were Rs. 2,00,000.

(*a*) What is the concern's Current Ratio ?

(*b*) In what way can this ratio be expressed as a percentage ?

(*2.5 : 1; 250%*)

2. From the following calculate the Current Ratio :

XYZ Company Limited

BALANCE SHEET as at 31st MARCH, 1990

Liabilities	Rs.	*Assets*	Rs.
Share Capital	21,000	Fixed Assets (Net)	17,000
General Reserve	1,500	Stock	6,200
Profit and Loss Account	2,500	Debtors	3,200
Bank Overdraft	2,000	Cash	6,600
Creditors	6,000		
	33,000		33,000

(*Adapted Delhi SSCE, 1981*)

(*2 : 1*)

3. Calculate Current Ratio from the following :

BALANCE SHEET as at 31st March, 1990

	Rs.		Rs.
Share Capital	7,50,000	Fixed Assets	4,85,000
Reserves	10,00,000	Investments	3,25,000
14% Debentures (due for redemption on 1.6.1990)	2,00,000	Current Assets	13,50,000
Current Liabilities	2,50,000	Miscellaneous Expenditure (to the extent not written off)	40,000
	22,00,000		22,00,000

(3 : 1)

(*Note :* Debentures have been taken as a current liability as they are due for redemption after two months from the date of Balance Sheet).

4. Following is the Balance Sheet of XYZ Limited as on 31st March, 1989 :

Liabilities	Rs.	*Assets*	Rs.
Equity Share Capital 2,400 shares of Rs. 10 each (fully paid)	24,000	Machinery and Equipment	45,000
Profit and Loss Account	6,000	Stock	12,000
10% Debentures	15,000	Sundry Debtors	9,000
Sundry Creditors	23,400	Cash at Bank	2,280
Provision for Taxation	600	Prepaid Expenses	720
	69,000		69,000

Calculate the following ratios :

(*i*) Current Ratio,

(*ii*) Liquidity Ratio.

What conclusions do you draw about the company on the basis of these ratios ? *(Adapted from Delhi SSCE, 1980)*

[(i) 1 : 1; (ii) 0.47 : 1)

(Provision for Taxation is taken as current liability. Prepaid expenses are not included in liquid assets).

5. The following are the abstracts from the Balance Sheet of Zed Ltd. :

	Dr. Balances Rs.		*Cr. Balances* Rs.
Marketable Securities	1,35,000	Sundry Creditors	1,40,000
Stock	1,80,000	Bills Payable	75,000
Debtors	2,70,000	Outstanding Expenses	15,000
Cast at Bank	2,25,000	Income Tax Payable	70,000
Bills Receivable	70,000		
Plant and Machinery	1,70,000		
Preliminary Expenses	35,000		
Underwriting Commission	22,000		
Prepaid Expenses	20,000		
Furniture and Fixtures	60,000		

Calculate :

(a) Net Working Capital ;

(b) Current Ratio ;

(c) Acid Test Ratio.

[(a) *Rs. 6,00,000;* (b) *3 : 1;* (c) *2.33 : 1*]

(*Note:* Prepaid expenses have been ignored in calculating liquid assets).

6. The Balance Sheet of R Ltd. as at 31st March, 1989 is as follows :

Liabilities	Rs.	*Assets*	Rs.
Equity Share Capital	3,00,000	Fixed Assets (net)	3,00,000
Reserves	1,00,000	Stock	1,00,000
Creditors	1,75,000	Debtors	40,000
Bills Payable	75,000	Bills Receivable	35,000
Taxes Payable	1,50,000	Cash at Bank	3,25,000
	8,00,000		8,00,000

The Current Ratio on this date comes to Rs. 5,00,000—Rs. 4,00,000 or 1.25 : 1. It is suggested that the desired current ratio can be obtained by paying some part of current liability. Calculate the amount of current liabilities which must be paid to obtain a Current Ratio of 2 : 1.

[*Payment of current liabilities Rs. 3,00,000*]

7. The Current Ratio of a company is 2 : 1. State, giving reasons which of the following transactions would (*i*) improve, (*ii*) reduce, (*iii*) not alter, the Current Ratio :

(a) Repayment of a current liability.

(b) Purchasing goods on credit.

(c) Sale of an office type-writer (book value 4,000) for Rs. 3,000 only.

(d) Sale of merchandise (cost Rs. 10,000) for Rs. 11,000.

(e) Payment of Dividend. (*All India SSCE, 1986*)

[(a), (c), (d) and (e) *will improve.* (b) *will reduce*]

8. The Trial Balance of X Ltd. showed current assets of Rs. 1,00,000 and current liabilities of Rs. 2,00,000. What effect would each of the following items have on the Current Ratio ?

(a) Creditors are paid in cash.

(b) Cash received from debtors.

(c) Goods are purchased on credit.

(d) Bills Payable are issued to creditors.

(e) Debentures are issued for cash.

[(c) *and* (e) *will improve;* (a) *will reduce;* (b) *and* (d) *will have no effect*]

9. (a) The Debt-Equity Ratio of a company is 1 : 2. Which of the following suggestions would increase, decrease and not change it ?

(i) Issue of equity shares.

(ii) Cash received from debtors.

(iii) Redemption of debentures.

(*iv*) Purchased goods on credit.

(*b*) Write a short note on the usefulness of the accounting ratios.

(*All India SSCE, 1984*)

[(*i*) *and* (*iii*) *will decrease* ; (*ii*) *and* (*iv*) *will have no effect*]

10. From the following Balance Sheet of Ved Ltd. as on 31st March, 1989, you are required to comment on (*i*) the liquidity, and (*ii*) solvency ratios of the company :

Liabilities	Rs.	*Assets*	Rs.
Share Capital	5,00,000	Fixed Assets	6,00,000
Long-term Liabilities	2,50,000	Current Assets	4,00,000
Current Liabilities	2,50,000		
	10,00,000		10,00,000

(*Adapted from All India SSCE, 1988*)

[(*i*) *1.6 : 1*; (*ii*) *.33 : 1*)]

11. From the following calculate the Debt-Equity Ratio :

	Rs.
Equity Share Capital :	
10,000 Equity Shares of Rs. 10 each	1,00,000
General Reserves	45,000
Profit and Loss Account	30,000
Debentures	75,000
Sundry Trade Creditors	40,000
Outstanding Expenses	10,000

(*Adapted from DSSE, 1981*)

(*3 : 1*)

12. X Ltd. has drawn up the following Profit and Loss Account for the year ended 31st March, 1989 :

PROFIT AND LOSS ACCOUNT of X Ltd.
for the year ended 30st March, 1989

Dr.	Rs.		Cr. Rs.
To Stock (1-4-1988)	6,500	By Sales	40,000
To Purchases	20,000	By Stock (31-3-1989)	9,500
To Wages	6,000		
To Mfg. Expenses	4,000		
To Gross Profit c/d	13,000		
	49,500		49,500
To Administrative Expenses	5,700	By Gross Profit b/d	13,000
To Selling and Distribution Expenses	1,000	By Compensation for Acquisition of Land	1,200
To General Expenses	300		
To Furniture (lost by fire)	200		
To Net Profit	7,000		
	14,200		14,200

Calculate the following ratios, mentioning the purposes of each :

(1) Gross Profit Ratio ;

(2) Operating Ratio ;

(3) Ratio of Operating Net Profit to Net Sales.

[(*i*) *32.5%* ; (*ii*) *85%*; (*iii*) *15%*]

13. The following are the summarised Profit and Loss Account for the year ending on 31st March, 1989 and the Balance Sheet as on that date :

TRADING AND PROFIT AND LOSS ACCOUNT

	Rs.		Rs.
To Opening Stock	10,000	By Sales	1,00,000
To Purchases	50,000	By Closing Stock	15,000
To Direct Expenses	5,000		
To Gross Profit c/d	50,000		
	1,15,000		1,15,000
To Administrative Expenses	15,000	By Gross Profit b/d	50,000
To Interest	3,000		
To Selling Expenses	12,000		
To Net Profit	20,000		
	50,000		50,000

BALANCE SHEET

	Rs.		Rs.
Capital	1,00,000	Land and Building	50,000
Profit and Loss Account	20,000	Plant & Machinery	30,000
Current Liabilities	40,000	Furniture	20,000
		Stock	15,000
		Sundry Debtors	15,000
		Cash in Hand and at Bank	17,500
		Bills Receivable	12,500
	1,60,000		1,60,000

From the above, calculate —

(*i*) Gross Profit Ratio ;

(*ii*) Current Ratio ;

(*iii*) Acid Test Ratio ;

(*iv*) Stock Turnover Ratio ;

(*v*) Fixed Assets Turnover Ratio (Cost of Sales basis).

(*Adapted from All India SSCE, 1982*)

[(*i*) *50%*; (*ii*) *1.5 : 1*; (*iii*) *1.125 : 1*; (*iv*) *4 times*; (*v*) *0.5 times*]

14. The following is the Balance Sheet of Goodwill Enterprises Limited for the year ended on 31st March, 1989 :

BALANCE SHEET

Liabilities	Rs.	Assets	Rs.
Equity Share Capital	4,00,000	Goodwill	2,40,000
Capital Reserve	80,000	Other Fixed Assets	5,60,000
Profit and Loss Account	1,20,000	Investments (short-term)	40,000
12% Mortgage Loan	2,00,000	Stock	1,20,000
Sundry Creditors	1,60,000	Cash	1,20,000
Bank Overdraft	40,000		
Provision for Taxation	80,000		
	10,80,000		10,80,000

Showing the full working, calculate the following ratios, giving the formulae and also state the purpose these ratios serve :

(*i*) Current Ratio ;

(*ii*) Quick Ratio ;

(*iii*) Debt-Equity Ratio. *(Adapted from DSSE, 1986)*

[(*i*) *1 : 1*; (*ii*) *.57 : 1*; (*iii*) *.25 : 1*]

15. From the following figures, calculate Gross Profit Ratios :

Year	Sales	Gross Profit
1986	5,00,000	60,000
1987	5,50,000	65,000
1988	7,00,000	75,000
1989	7,50,000	80,000

(12%, 11.8%, 10.7%; 10.67%]

16. (*a*) Opening Stock Rs. 29,000 ; Closing Stock Rs. 31,000 ; Sales Rs. 3,20,000 ; Gross Profit Ratio 25% on Sales. Calculate Stock Turnover Ratio. *(Delhi SSCE, 1979)*

(*b*) Current liabilities of a company are Rs. 3,00,000. Its Current Ratio is 3 : 1 and Quick Ratio is 1 : 1. Calculate the value of stock-in-trade.

(All India SSCE, 1988)

[(*a*) *8 times*; (*b*) *Rs. 6,00,000*]

17. The following data relate to a company for the years 1988 and 1989 :

	1988	1989
Sales	Rs. 2,00,000	Rs. 3,00,000
Cost of goods sold	1,40,000	2,34,000
Gross Profit	60,000	66,000

As a Managing Director of the company, what is your reaction to the Rs. 6,000 (10%) increase in gross profit in 1989 ?

18. The following are the summarized Profit and Loss Account of Triplex Industries Limited for the year ended 31st March, 1989 and a Balance Sheet of the company as on that date :

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Opening Stock	9,950	By Sales	85,000
To Purchases	54,525	By Closing Stock	14,900
To Carriage Inwards	1,425		
To Gross Profit c/d	34,000		
	99,900		99,900
To Office Expenses	15,000	By Gross Profit b/d	34,000
To Selling Expenses	3,000	By Profit on Sale of Shares	600
To Financial Expenses	1,500	By Interest on Investments	300
To Loss on Sale of an Asset	400		
To Net Profit	15,000		
	34,900		34,900

BALANCE SHEET

Liabilities	Rs.	*Assets*	Rs.
Share Capital		Land and Buildings	15,000
2,000 Equity Shares of		Plant	8,000
Rs. 10 each	20,000	Stock	14,000
Reserves	9,000	Debtors	7,000
Profit and Loss Account	6,000	Bills Receivable	1,000
Bank Overdraft	3,000	Cash and Bank Balances	3,000
Sundry Creditors	8,000		
Outstanding Expenses	2,000		
	48,000		48,000

Calculate the following ratios :

(*i*) Gross Profit Ratio. (*ii*) Debt-Equity Ratio.

(*iii*) Liquid Ratio. (*iv*) Fixed Assets Turnover Ratio

(*Adapted from Delhi SSCE, 1979*)

[(*i*) *40%*; (*ii*) *Nil* (*iii*) *1.1 : 1*; (*iv*) *3.69 times*]

19. From the Financial Statements given below, calculate :

(*a*) Current Assets Ratio ;

(*b*) Stock Turnover Ratio ;

(*c*) Gross Profit Ratio ;

(*d*) Net Profit Ratio ;

(*e*) Liquidity Ratio.

Dr. TRADING AND PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Opening Stock	1,000	By Sales	8,000
To Purchases	4,000	By Closing Stock	2,000
To Gross Profit c/d	5,000		
	10,000		10,000

(*Contd.*)

	Rs.		Rs.
To Sundry Expenses	4,000	By Gross Profit b/d	5,000
To Net Profit	1,000		
	5,000		5,000

BALANCE SHEET

Liabilities	Rs.		*Assets*		Rs.
Capital	22,000		Fixed Assets		20,000
Add Net Profit	1,000	23,000	Current Assets :		
Current Liabilities		3,000	Liquid Assets	4,000	
			Stock	2,000	6,000
		26,000			26,000

(All India SSCE, 1979)

[*(a)* 2 : 1; *(b)* 2 *times*; *(c)* 62.5%; *(d)* 12.5%; *(e)* 1.33 : 1]

20. The following is the Trading and Profit and Loss Account and the Balance Sheet of New Company Limited for the year ending 31st March, 1990 :

TRADING AND PROFIT AND LOSS ACCOUNT

Dr. for the year ended 31st March, 1990 Cr.

	Rs.		Rs.
To Opening Stock	61,000	By Sales	4,00,400
To Purchases	2,52,200	By Closing Stock	78,400
To Carriage Inward	1,600		
To Wages	4,000		
To Gross Profit c/d	1,60,000		
	4,78,800		4,78,800
To Administrative Expenses	80,000	By Gross Profit b/d	1,60,000
To Selling and Distribution Expenses	9,600	By Non-Operating Incomes	4,000
To Finance Expenses	5,600		
To Other Non-Operating Expenses	1,600		
To Net Profit	67,200		
	1,64,000		1,64,000

BALANCE SHEET as at 31st March, 1990

Liabilities	Rs.	*Assets*	Rs.
Share Capital (paid-up) :		Land and Building	2,00,000
Equity Share Capital	2,00,000	Plant and Machinery	40,400
Preference Share Capital	80,000	Stock	78,400
General Reserves	4,800	Sundry Debtors	36,000

(Contd.)

	Rs.		Rs.
Profit and Loss Account	67,200	Bank	10,000
Bank Overdraft	2,800	Cash	2,000
Creditors	12,000		
	3,66,800		3,66,800

Calculate the following ratios and indicate the purpose which they serve :

(*i*) Gross Profit Ratio.

(*ii*) Operating Profit Ratio.

(*iii*) Current Ratio.

(*iv*) Liquidity Ratio. (*Adapted from All India SSCE, 1989*)

[(*i*) 39.96%; (*ii*) *17.58%;* (*iii*) *8.54 : 1;* (*iv*) *3.24 : 1*]

21. The following is the Balance Sheet of Arvind Mills Ltd., as on 31st March, 1989 :

Liabilities	Rs.	*Assets*		Rs.
Sundry Creditors	60,000	Bank		50,000
Bills Payable	1,00,000	Investments		1,50,000
Tax Provision	1,30,000	Book Debts		2,00,000
Outstanding Expenses	10,000	Stock		3,00,000
6% Debentures	7,00,000	Fixed Assets	18,00,000	
8% Preference Shares	1,00,000	*Less*		
Equity Shares	5,00,000	Depreciation	5,00,000	13,00,000
General Reserve	4,00,000			
	20,00,000			20,00,000

Other information supplied is as follows :

		Rs.
(*a*)	Net Sales	30,00,000
(*b*)	Cost of goods sold	25,80,000
(*c*)	Net income before tax	2,00,000
(*d*)	Net income after tax	1,00,000

You are required to calculate :

(*i*) Liquidity Ratio ;

(*ii*) Proprietory Ratio ;

(*iii*) Current Ratio ;

(*iv*) Gross Profit Ratio ;

(*v*) Net Profit Ratio.

(*Adapted from All India SSCE, 1983*)

[(*i*) *1.33 : 1;* (*ii*) *50%* (*iii*) *2.33 : 1* (*iv*) *14%;* (*v*) *6.67%*]

22. The following information is given about a company :

	Rs.
Sales	1,50,000
Gross Profit	30,000
Cost of Goods Sold	1,20,000
Opening Stock	29,000
Closing Stock	31,000
Debtors	16,000
Net Profit	14,000
Net Fixed Assets	1,10,000

From the above information, calculate the following ratios :

(*i*) Fixed Assets Turnover Ratio.
(*ii*) Gross Profit Ratio.
(*iii*) Stock Turnover Ratio.
(*iv*) Debtors' Turnover Ratio.
(*v*) Net Profit Ratio.

(Delhi SSCE, 1989)

[(*i*) *1.36 times;* (*ii*) *20%;* (*iii*) *4 times;* (*iv*) *9.375 times;* (*v*) *9.33%*]

23. From the following data, calculate :

(*i*) Gross Profit Ratio,
(*ii*) Net Profit Ratio,
(*iii*) Working Capital Turnover Ratio,
(*iv*) Debt-Equity Ratio.

	Rs.
Net Sales	30,00,000
Cost of Sales	20,00,000
Net Profit	3,00,000
Current Assets	6,00,000
Current Liabilities	2,00,000
Paid-up Share Capital	5,00,000
Debentures	2,50,000

(Delhi SSCE, 1987)

[(*i*) *33.33%;* (*ii*) *10%;* (*iii*) *7.5 times* (*iv*) *.24 : 1*]

24. From the following data, calculate :

(*a*) Gross Profit Ratio ;
(*b*) Net Profit Ratio ;
(*c*) Inventory Turnover Ratio ;
(*d*) Current Ratio.

	Rs.		Rs.
Sales	25,20,000	Fixed Assets	14,40,000
Cost of Sales	19,20,000	Net Worth	15,00,000
Net Profit	3,60,000	Debt (Long-term)	9,00,000
Average Inventory	8,00,000	Current Liabilities	6,00,000
Other Current Assets	7,60,000		

(All India SSCE, 1981)

[(*a*) *23.81%;* (*b*) *14.29%;* (*c*) *2.4 times;* (*d*) *2.6 : 1*]

25. You are required to calculate Fixed Assets Turnover Ratio from the following details :

	Rs.
Land and Buildings	3,20,000
Cash at Bank	1,15,000
Plant and Machinery	3,60,000
Closing Stock	95,000
Furniture and Fixtures	1,20,000
Preliminary Expenses	35,000
Marketable Securities	65,000
Sales (all credit)	8,00,000

(*1 time*)

26. B Ltd. gives you the following details for the two financial years ending on 31st March, 1989 and 31st March, 1990 respectively. As financial analyst, comment upon the utilisation of fixed assets by the company :

	31.3.1989	31.3.1990
	Rs.	Rs.
Sales	6,00,000	12,00,000
Fixed Assets	3,00,000	5,00,000

(*Fixed Assets Turnover Ratio 2 times; 2.4 times*)

27. Calculate Fixed Assets Turnover Ratio (Sales Basis) from the following details :

	Rs.
Fixed Assets (Net)	6,20,000
Total Depreciation uptodate	1,20,000
Cost of Sales	7,00,000
Gross Profit	2,30,000

(*1.5 times*)

28. Cee Ltd. has the following Balance Sheet as at March 31st, 1989 :

Liabilities	Rs.	*Assets*	Rs.
85,000 Equity Shares of Rs. 10 each, fully paid up	8,50,000	Plant and Machinery	6,10,000
Profit and Loss Account	1,30,000	Furniture and Fittings	1,20,000
General Reserve	70,000	Patents and Trade Marks	70,000
14% Debentures	2,00,000	Stock	2,50,000
Bills Payable	30,000	Sundry Debtors	2,70,000
Sundry Creditors	1,40,000	Cash in Hand	30,000
Provision for Tax	1,30,000	Cash in Bank	1,20,000
		Bills Receivable	70,000
		Prepaid Rent	60,000
		Underwriting Commission (On issue of Shares to the extent not written off)	50,000
	15,50,000		15,50,000

The company's sales during the year were Rs. 20,00,000. The ratio of gross profit to sales was 25%. You are required to calculate the following ratios :

(i) Fixed Assets Turnover Ratio
(ii) Working Capital Turnover Ratio
(iii) Debt-Equity Ratio
(iv) Quick Ratio.

[*(i) 2.5 or 2 times (ii) 5 or 4 times (iii) 0.16 : 1 (iv) 1.5 : 1*]

29. Calculate Net Working Capital Turnover Ratio from the following details :

	Rs.
Opening Stock	1,00,000
Purchases	2,80,000
Direct Expenses	70,000
Closing Stock	90,000
Current Liabilities	2,40,000
Working Capital	1,20,000

(*3 times*)

30. Calculate Net Working Capital Turnover Ratio (Cost of Sales Basis) **from the** following details :

Dr. TRADING ACCOUNT Cr.

	Rs.		Rs.
To Opening Stock	40,000	By Sales	8,00,000
To Purchases	5,00,000	By Closing Stock	80,000
To Direct Expenses	1,40,000		
To Gross Profit	2,00,000		
	8,80,000		8,80,000

Additional information :

	Rs.
Debtors	95,000
Creditors	70,000
Bills Receivable	40,000
Bills Payable	25,000
Preliminary Expenses	18,000
Cash at Bank	85,000
Outstanding Expenses	5,000

(*3 times; Current Assets Rs. 3,00,000; Current Liabilities Rs. 1,00,000*)

31. (*a*) Calculate the Net Accounts Receivable from the following :

	Rs.
Debtors (Gross)	1,67,000
Provision for Doubtful Debts	7,000
Bills Receivable	40,000

(*Rs. 2,00,000*)

(*b*) Compute the Average Accounts Receivable from the following:

	31.3.1990	31.3.1989
Debtors	1,65,000	2,10,000
Bills Receivable	35,000	40,000

(Rs. 2,25,000)

32. (*a*) A firm normally has debtors equal to two months' credit sales. During the coming year it expects credit sales of Rs. 7,20,000 spread over evenly over the year (12 months). What is the estimated amount of debtors at the end of the year?

(*Delhi SSCE, 1985*)

(*Rs. 1,20,000*)

(*b*) Calculate Debtors Turnover Ratio from the following data :

	Rs.
Total sales for the year	2,00,000
Cash sales for the year	40,000
Debtors at the beginning of the year	20,000
Debtors at the end of the year	60,000

State the significance of this ratio (*Delhi SSCE, 1985*)

(*4 times*)

33. Calculate Average Collection Period or Debt Collection Period for the year ending 31st March, 1990 :

	Rs.
Sales during the year	7,30,000
Debtors as on 31.3.90	85,000
Bills Receivable as on 31.3.90	15,000

(*50 days*)

34. (*a*) From the following particulars, determine the amount of gross profit and sales:

Average Stock	Rs. 80,000
Stock Turnover Ratio	6 times
Selling Price	25% above cost

(*All India SSCE, 1984*)

(*Gross Profit Rs. 1,20,000; Sales Rs. 6,00,000*)

(*b*) From the following particulars, determine Debtors Turnover Ratio and Average Collection Period :

	Rs.
Total Sales	10,00,000
Credit Sales	8,00,000
Debtors	1,00,00

(*Delhi SSCE, 1983*)

(*8 times, 46 days*)

(*c*) Calculate Stock Turnover Ratio from the data given below :

	Rs.
Stock at the beginning of the year	20,000
Stock at the end of the year	10,000
Purchases	50,000

Carriage Inwards	5,000
Sales	1,00,000

State the significance of this ratio. (*Delhi SSCE, 1984*)

(*4.33 times*)

35. Calculate Debtors Turnover Ratio, Average Collection Period from the following details :

	Rs.
Net Credit Sales	4,00,000
Opening Debtors	90,000
Closing Debtors	70,000

The 60 days credit term is common for the industry. Also state whether the debts are being collected efficiently or not.

(*5 times; 73 days; debt collection unsatisfactory*)

36. (*a*) You are required to calculate Debt Collection Period from the following :

	Rs.
Total Gross Sales	4,80,000
Cash Sales	1,10,000
Sales Returns	5,000
Closing Debtors	63,000
Closing Bills Receivable	12,000

(*75 days*)

(*b*) Calculate Average Collection Period in months and weeks from the following details :

	Rs.
Cash Sales	3,60,000
Credit Sales	10,40,000
Closing Debtors	2,13,000
Closing Bills Receivable	47,500

(*3 months, 12 weeks*)

37. (*a*) Calculate Opening Creditors from the following :

	Rs.
Credit Purchases	2,00,000
Closing Creditors	50,000
Creditors' Turnover Ratio	5 times

(*Rs. 30,000*)

(*b*) Calculate the amount of Total Sales from the following details :

	Rs.
Cash Sales during the year	1,10,000
Sales Returns during the year	15,000
Opening Debtors	45,000
Closing Debtors	35,000
Debtors Turnover Ratio	10 times

(*Credit Sales Rs. 4,00,000; Total Sales including Returns Rs. 5,25,000*)

38. Archies intends to supply goods on credit to Giggles & Co. and Dee Paul & Sons.

The relevant details for the year ending 31st March, 1989 are as follows :

	Giggles & Co.	Dee Paul & Sons
	Rs.	Rs.
Trade Creditors	3,00,000	1,60,000
Total Purchases	9,30,000	6,60,000
Cash Purchases	30,000	20,000

Advise with reasons as to which company he should prefer to deal with.

(Creditors' Turnover Ratio : Giggles & Co. 3 times; Dee Paul & Sons 4 times; He should prefer to deal with Dee Paul & Sons)

39. The following is the vertical Profit and Loss Account of Mohan Brothers for the year ended on March 31, 1989 :

		Rs.
Net Sales		30,00,000
Less Cost of Goods Sold :		
Opening Stock	5,00,000	
Add Purchases	20,00,000	
	25,00,000	
Less Closing Stock	7,00,000	18,00,000
Gross Profit		12,00,000
Less Operating Expenses		4,80,000
Operating Profit		7,20,000
Less Interest Charge		1,80,000
Profit before Taxation		5,40,000

Additional information as on March 31, 1989 :

Current Assets	9,75,000
Current Liabilities	6,00,000
Fixed Assets	5,25,000

From the above particulars calculate any four ratios out of the following :

(*i*) Cost of Goods Sold Ratio ;
(*ii*) Operating Ratio ;
(*iii*) Operating Profit Ratio ;
(*iv*) Stock Turnover Ratio ;
(*v*) Assets Turnover Ratio ;
(*vi*) Return on Capital Employed. *(Delhi SSCE, 1988)*

[(i) 60%; (ii) 76%; (iii) 24%; (iv) 3 times; (v) 2 times; (vi) 80%]

40. You are required to prepare Profit and Loss Account from the following details :

Cost of Goods Sold	Rs. 8,00,000
Gross Profit Ratio	20%
Administrative Expenses Ratio	7%

Selling and Distribution Expenses Ratio 5%
Non-Operating Income to Sales 8%

Financial expenses are equal to selling and distribution expenses.

(*Total of Profit and Loss Account Rs. 2,80,000 ; Net Profit Rs. 1,10,000*)

41. From the following Trading and Profit and Loss Account of Vyas Ltd. for the year ending 31st March, 1989, calculate :

(*i*) Net Profit Ratio ;
(*ii*) Operating Ratio ;
(*iii*) Administrative Expenses Ratio ;
(*iv*) Selling and Distribution Expenses Ratio.

Dr. TRADING AND PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Opening Stock	90,000	By Sales	10,00,000
To Purchases	6,30,000	By Closing Stock	2,00,000
To Direct Expenses	80,000		
To Gross Profit c/d	4,00,000		
	12,00,000		12,00,000
To Administrative Expenses	1,30,000	By Gross Profit b/d	4,00,000
To Selling and Distribution Expenses	70,000	By Non-Operating Incomes	40,000
To Financial Expenses	30,000		
To Other Non-Operating Expenses	20,000		
To Net Profit	1,90,000		
	4,40,000		4,40,000

[(*i*) *20%;* (*ii*) *80%;* (*iii*) *13%;* (*iv*) *7%*]

42. The following is the summarised Balance Sheet of Smriti Ltd. for the year ending 31st March, 1989 :

Liabilities	Rs.	*Assets*	Rs.
Share Capital :		Fixed Assets	7,00,000
Equity shares of Rs. 10 each, fully paid	6,00,000	Investments	1,50,000
		Current Assets	3,50,000
General Reserve	68,000		
Profit and Loss Account	1,32,000		
2,000 10% Debentures of Rs. 100 each, fully paid	2,00,000		
Current Liabilities	2,00,000		
	12,00,000		12,00,000

The Net Profit after tax is Rs. 1,20,000 during the year. Income tax has been provided @ 50%.

You are required to calculate the following ratios :

(*i*) Fixed Charges Cover or Interest Coverage Ratio ;
(*ii*) Debt Equity Ratio ;
(*iii*) Debt to Total Funds Ratio.

[(*i*) *13 times;* (*ii*) *.2 : 1;* (*iii*) *0.33 : 1*]

43. Calculate the following ratios from the financial statements given below for Kay Ltd. :

(*a*) Current Ratio ;
(*b*) Acid Test Ratio ;
(*c*) Stock Turnover Ratio ;
(*d*) Debt Equity Ratio ;
(*e*) Interest Coverage Ratio.

INCOME STATEMENT OF KAY LTD.
for the year ended 31st March, 1990

	Rs.	Rs.
Sales		5,00,000
Cost of Goods Sold:		
Stock, April 1, 1989	40,000	
Add Purchases	2,45,000	
Direct Expenses	25,000	
	3,10,000	
Less Stock, March 31, 1990	60,000	
		2,50,000
Gross Profit		2,50,000
Operating Expenses	1,10,000	
Interest Expenses	20,000	
Total Expenses		1,30,000
Net Profit before Income Tax		1,20,000
Provision for Income Tax		60,000
Net Profit		60,000

BALANCE SHEET as at 31st March, 1990

Liabilities	Rs.	Assets	Rs.
Equity Share Capital	1,50,000	Fixed Assets (Cost)	5,40,000
Reserves and Surplus	3,00,000	Stock	1,25,000
10% Debentures	2,00,000	Debtors	2,30,000
Creditors	1,80,000	Cash at Bank	90,000
Bills Payable	70,000	Bills Receivable	43,000
Accumulated Depreciation	1,40,000	Prepaid Expenses	12,000
	10,40,000		10,40,000

[(*a*) *2 : 1;* (*b*) *1.5 : 1;* (*c*) *5 times;* (*d*) *0.31 : 1;* (*e*) *7 times*]

44. Calculate Return on Capital Employed from the following details .

	Rs.
Land and Buildings	5,00,000
Plant and Machinery	6,70,000
Furniture and Fittings	2,30,000
Stock	4,00,000
Sundry Debtors	2,30,000
Cash at Bank	1,20,000
Sundry Creditors	1,50,000
Net Profit before Tax and Interest	9,00,000

(45%)

(*Hint* : Calculate Fixed Assets and net Working Capital.)

45. Compute Return on Capital Employed from the following details :

	Rs.
Net Profit after Tax	43,000
Rate of Income Tax	50%
14% Debentures	1,00,000
Share Capital	2,50,000
Profit and Loss Account	1,58,000
Loss on Issue of Debentures	8,000

(20%)

[*Hint* : $\dfrac{\text{Net Profit before Interest and Tax}}{\text{Share Capital + Profit and Loss Account – Loss on Issue of Debentures + 14\% Debentures}}$]

46. Calculate Return on Equity from the following details :

	Rs.
Net Profit after Interest, Tax and Dividend	4,50,000
Equity Share Capital :	
80,000 shares of Rs. 10 each, fully paid up	8,00,000
Share Premium	1,60,000
General Reserve	2,90,000
Profit and Loss Account	1,00,000

(33.33%)

47. Compute Return on Equity from the following details :

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Operating Expenses	3,60,000	By Gross Profit b/fd	6,00,000
To Net Profit (Subject to Income Tax @ 50%)	2,40,000		
	6,00,000		6,00,000

Other details :

	Rs.
Equity Share Capital	4,50,000
Share Premium Account	1,50,000
General Reserve	2,70,000

Capital Reserve	1,30,000
Profit and Loss Account	2,00,000

(10%)

48. Nakul Ltd. presents to you the following Balance Sheet as at March 31, 1989 :

Liabilities	Rs.	*Assets*	Rs.	
80,000 Equity Shares of Rs. 10 each, fully paid up	8,00,000	Land and Buildings		2,30,000
2,000 15% Non-Convertible Debentures of Rs. 100 each, fully paid up	2,00,000	Plant and Machinery	4,00,000	
		Less Depreciation	1,30,000	2,70,000
		Furniture		50,000
Profit and Loss Account	2,00,000	Maruti Vans	3,30,000	
Sundry Creditors	1,30,000	*Less* Depreciation	80,000	2,50,000
Outstanding Salaries	45,000	Investments :		
Provision for Tax	75,000	9% IDBI Bonds		2,00,000
		Stock in Trade		1,30,000
		Sundry Debtors		1,40,000
		Cash at Bank		1,00,000
		Bills Receivable		50,000
		Prepaid Rent		30,000
	14,50,000			14,50,000

The net profit after tax amounted to Rs. 75,000. Income tax has been charged @ 50%. Calculate Return on Investment or Capital Employed from the above Balance Sheet.

(*Hint* : Interest on Debentures comes to Rs. 30,000). *(15%)*

49. Complete the following Balance Sheet from the information given below :

Liabilities	Rs.	*Assets*	Rs.
Short-term Debt		Cash	
Long-term Debt		Stock	
Total Debt		Current Assets	
Owner's Equity		Fixed Assets	

The firm has owner's equity of Rs. 1,00,000. The ratios for the firm are :

Short-term Debt to Total Debt	= 0.40
Total Debt to Owner's Equity	= 0.60
Fixed Assets to Owner's Equity	= 0.60
Total Assets Turnover	= 2 times
Stock Turnover	= 8 times

(Total of Balance Sheet Rs. 1,60,000)

50. The Profit and Loss Appropriation Account of Arjun Ltd. for the year ending 31st March, 1989 is as follows :

Dr.	PROFIT AND LOSS APPROPRIATION ACCOUNT		Cr.
	Rs.		Rs.
To transfer to General Reserve (10% of net profits)	10,000	By Balance b/fd	70,000
To Dividends Payable (50% on Rs. 5,00,000)	2,50,000	By Net Profit for the year	3,65,000
To Balance c/d	1,75,000		
	4,35,000		4,35,000

Additional Information :

(*i*) Provision for Income Tax has been made @ 50%.

(*ii*) The Company's Balance Sheet shows the following :

— 5,000 14% Non Convertible Debentures of Rs. 100 each, fully paid up

— General Reserve on 1.4.88 Rs. 1,30,000.

Compute Return on Capital Employed Ratio.

(*66.67%*)

51. The following is the Balance Sheet of Bharat Rubber Ltd., as on 31st March, 1989 :

Liabilities	Amount Rs.	*Assets*	Amount Rs.
Share Capital	3,20,000	Building	3,00,000
9% Debentures	1,20,000	Machinery	60,000
Current Liabilities	3,04,000	Stock	1,76,000
Profit and Loss A/c	48,000	Debtors	3,28,000
Reserves	1,00,000	Bank	28,000
	8,92,000		8,92,000

From the Balance Sheet given above, work out any four ratios out of the following :

(*i*) Proprietory Ratio ;

(*ii*) Debt Equity Ratio ;

(*iii*) Fixed Assets to Current Assets Ratio ;

(*iv*) Creditors Equity Ratio ;

(*v*) Long-term Funds to Fixed Assets Ratio ;

(*vi*) Reserves to Capital Ratio. (*Adapted from All India SSCE, 1985*)

[(*i*) *.52 : 1*; (*ii*) *.20 : 1*; (*iii*) *.68 : 1*; (*iv*) *.36 : 1*; (*v*) *1.63 : 1*; (*vi*) *.46 : 1*]

52. The Balance Sheet of Zed Ltd. as at 31st March, 1989 is given below :

Liabilities	Rs.	*Assets*	Rs.
Equity Share Capital	6,00,000	Fixed Assets	5,00,000
Reserves	1,80,000	Current Assets:	
Creditors	1,20,000	Stock	1,80,000
		Debtors	1,20,000
		Cash at Bank	1,00,000
	9,00,000		9,00,000

The other details are as follows :

(*i*) Total Sales during the year have been Rs. 10,00,000 out of which Cash Sales amounted to Rs. 2,00,000.

(*ii*) The Gross Profit has been earned @ 20%.

(*iii*)	Debtors as on 1.4.88	Rs.	80,000
	Stock as on 1.4.88	Rs.	1,40,000
	Creditors as on 1.4.88	Rs.	30,000
(*iv*)	Cash paid to creditors during the year	Rs.	2,10,000

You are required to calculate the following ratios :

(*i*) Debtors Turnover Ratio

(*ii*) Creditors Turnover Ratio

(*iii*) Stock Turnover Ratio.

[(*i*) *8 times;* (*ii*) *4 times;* (*iii*) *5 times*]

53. Below are given some important ratios and the desirable standards against each. You are required to judge the efficiency of the working of the concern.

	Ratio	Standard
Current Ratio	2.00	2.50
Gross Profit Ratio	.35	.30
Fixed Expense Ratio to Sales	.25	.20
Variable Expense Ratio to Sales	.10	.10
Sales/Capital	4.00	3.00
Fixed Assets/Long Term Funds	.90	1.00
Rate of Return on Capital	20%	15%

54. You are required to calculate Return on Investment from the following :

	Rs.
Net Profit after Tax	3,25,000
Rate of Income Tax	50%
12.5% Convertible Debentures of Rs. 100 each	4,00,000
Fixed Assets (at Cost)	12,30,000
Depreciation uptodate	2,30,000
Current Assets	7,50,000
Current Liabilities	3,50,000
	(50%)

[*Note :* $\dfrac{\text{Net Profit before Interest and Tax}}{\text{Net Fixed Assets + Net Working Capital}} \times 100$

(*i*) Calculate Net Profit before Tax.

(*ii*) *Add* Rs. 50,000 Interest on Debentures to this Profit.

(*iii*) Compute Net Fixed Assets and Net Working Capital]

UNIT 6

Statement of Changes in Financial Position

(20 Marks)

Meaning
Objectives
Preparation of
(*a*) Funds Flow Statement (net working capital basis) ;
(*b*) Cash Flow Statement (Statement on cash basis) —
Adjustments of depreciation and amortization of intangible assets.
Difference between the two types of statements.

10

Statement of Changes in Financial Position

In the course of business operations, the assets and equities (these include liabilities to outsiders and capital) undergo various changes from one point of time to another. These changes are the result of various transactions which take place in an undertaking during a financial year. All these changes are truly reported year after year in the published accounts in case of companies registered under the Companies Act, 1956. But the persons, who are not directly involved in the management of the company, fail to get any idea about the reasons of the changes even though they are keenly interested in the affairs of the company. For example, plant and machinery might have been purchased by a company by issuing debentures. This type of important investment decision will not be highlighted by the Balance Sheet. Take another example. A company may not be able to pay cash dividends although it has earned handsome profits. This may be due to the fact that the company has invested huge amounts in land and buildings. The statement showing changes in financial position (SCFP) reveals such important facts.

Statement of changes in financial position provides a meaningful link between the Balance Sheet at the beginning and at the end of a period and the Profit and Loss Account for that period. To prepare this statement relevant data contained in the Profit and Loss Account and the Balance Sheet is selected, reclassified and summarised. It should be clearly understood that this statement is in no way a substitute for a Balance Sheet and Profit and Loss Account. It is prepared and presented for the period covered by the above two statements.

Although there is no legal requirement for the preparation of statement of changes in financial position, the Accounting Standard 3 issued by the Institute of Chartered Accountants of India requires this statement to be published alongwith the annual accounts. This statement is also known as 'Statement of Sources and Applications of Funds'.

The statement may be prepared on —

(i) Net Working Capital basis. In such a case the statement is known as *Funds Flow Statement.*

(ii) Cash basis. In such a case, the Statement is known as *Cash Flow Statement.*

FUNDS FLOW STATEMENT

Concept of Funds

To a layman, the term "funds" means cash. A small businessman also usually confuses 'income' and 'funds' or 'cash'. Sometimes, it may happen that the Profit and Loss Account shows a sizable profit whereas the Balance Sheet shows a substantial decline in cash. This situation may put him in a quandary. If there is a profit, where is it or where has it gone? A simple Balance Sheet may not adequately answer this question. Hence the need for Cash/Funds Flow Statement which dispels this confusion.

To businessmen and financial analysts "*funds*" means "*working capital*". Working capital is the *excess* of current assets over current liabilities.

Why are "Funds" Defined as "Working Capital" ?

We know there is a continuous change in current assets and current liabilities of a business undertaking. In other words there is a continuous inflow and outflow of these assets and liabilities. For example, when goods are purchased on credit, both inventory or stock and accounts payable increase. Accounts payable mean creditors and bills payable. Likewise, when goods are sold inventory decreases (to the extent of cost) and accounts receivable, *i.e.* debtors or bills receivable) increase (by the amount of the selling price) and income is earned (*i.e.*, the difference between the selling price and cost of goods sold). When accounts receivable are realised, cash increases. The cycle will be complete when cash is paid off to the accounts payable created when goods were purchased. This cycle is repeated again and again during a financial year.

The result, in simple words, is that accounts payable are used to finance short-term cash needs of a business. Goods purchased on credit may be sold before the account falls due. Furthermore investments, accounts receivable, and inventories represent relatively liquid or short-term resources. These liquid resources or current assets are constantly being converted into cash which is used to pay off current liabilities. *The net amount of short-term resources available to a firm at any given time is represented by its working capital, i.e., the excess of current assets over current liabilities, or the quantity of 'funds' on hand at any given time.*

Importance of Funds Flow Statement

As already seen, various groups of persons are interested in the soundness of the financial decisions taken by the management of an undertaking. The published accounts of the undertaking do not, however, throw sufficient light as to make valid judgment possible and do not supply

answer to some relevant questions. For example, the information supplied by the published accounts leaves the following questions unanswered.

(a) Why is the dividend not declared inspite of an increase in profits earned ?
(b) Why has the bank overdraft increased even when the undertaking has earned profits ?
(c) Why is the working capital less even when the net income has gone up ?
(d) How have the dividends been declared even when there is loss in the current year ?
(e) How has the additional plant been financed ?
(f) How have the proceeds of the sale of fixed assets been utilised?
(g) Why has the share capital been increased ?
(h) How have the additional funds been used ?
(i) What are the ways by which net working capital has increased ?

All the above questions and many others of the same nature can be satisfactorily answered only when a "Funds Flow Statement" is prepared. This statement explains the reasons for the changes in various assets and liabilities of the undertaking. 'Funds' here means either the 'net current assets' or 'net working capital' and the funds flow statement analyses the reasons of change in the net working capital of the undertaking.

The study of funds flow statement is important due to the follow reasons :

1. *Understanding the change.* Financial Statements of a business undertaking indicate the extent of change in assets and liabilities which takes place in the business during a financial year. A funds flow statement explains the reasons of these changes.

2. *Valuation of financial policies of the business.* A funds flow statement helps us to understand the financial policies of the business specially with regard to investments in fixed assets. We can easily find out the extent of finances arranged from internal and external sources. External sources include the borrowed amount and the equity amount. This information is not easily available from the financial statements.

3. *Knowledge of good and bad points of the business.* A funds flow statement helps the shareholders to understand the good and bad points of the business because it brings out more reliable figures for profit and loss of the business. The ordinary profit and loss account can easily be manipulated by a shrewd management by overcharging or undercharging depreciation and by changing the inventory valuation method slightly, but the same is not possible in case of funds flow statement because ordinarily depreciation does not affect it at all.

4. *Helps in future planning.* If the management gets the funds flow statement prepared in advance before starting any new programme of expansion on the basis of probable data, it will positively help it in improving

the planning. This also helps in initiating the process of budgeting in business. By this process, the management can know the requirements of future finances and their possible sources. It can easily ascertain the internal and external sources of finances and proceed accordingly thereby making the plans more effective.

5. *Supplements financial statements.* A funds flow statement is not a substitute for traditional financial statements in any way. However, it supplements the information in the financial statements.

SOURCES AND USES OF FUNDS

A funds flow statement describes the sources from where additional funds were received and the uses to which they were put. It is prepared from an analysis of changes that take place in assets and equities between two balance sheet dates.

Any transaction that increases the amount of working capital is a source (or inflow) of funds.

Example. Goods costing Rs. 500 are sold for Rs. 600. In this case, cash increases by Rs. 600 and stock of goods decreases by Rs. 500, thus resulting in increase of working capital by Rs. 100.

Any transaction that decreases the amount of working capital is a use (or application or outflow) of funds.

Example. Rent amounting to Rs. 200 is paid in cash. This results in decrease in working capital or use or application of funds.

The problem, which has been rather over-simplified by taking two very simple examples, is elaborated further. Take, for example, the following Balance Sheet of a business :

BALANCE SHEET as on 31st March, 1989

Current Liabilities :	Rs.	Current Assets :	Rs.
Creditors	9,000	Cash	5,000
Bills Payable	2,000	Debtors	8,000
Non-Current Liabilities :		Bills Receivable	3,000
(*a*) Long-termLiabilities—		Stock	7,000
Debentures	19,000	Fixed or non-current	
(*b*) Capital	60,000	Assets :	
		Furniture	4,000
		Plant	13,000
		Building	50,000
	90,000		90,000

The working capital in this case comes to
= Current Assets − Current Liabilities
= Rs. 23,000 − Rs. 11,000 = Rs. 12,000

Now let us consider some transactions which affect, and some transactions which do not affect, working capital.

(1) Transactions which do not affect working capital

These include:

(*a*) Transactions affecting current assets and current liabilities, *e.g.*, payment of cash to a creditor or meeting of a bill payable on due date. There is a decrease of a current asset and a corresponding decrease of a current liability. The working capital therefore remains unaffected. A simple example will explain this point.

The current assets in the Balance Sheet given above are Rs. 23,000 and current liabilities are Rs. 11,000. The working capital is Rs. 12,000. If both current assets and current liabilities are reduced by Rs. 1,000, the working capital will remain Rs. 12,000 (*i.e.*, Rs. 22,000 – Rs. 10,000).

(*b*) Transactions resulting in replacement of one current asset by another current asset of the same amount, *e.g.*, receipt of cash from debtors or against bills receivables. But not sales of goods which results in increase in working capital by the amount of profit made or decrease in working capital by the amount of loss incurred.

(*c*) Transactions resulting in replacement of one current liability for another current liability of the same amount, *e.g.*, acceptance of a bill which results in substitution of bills payable for a trade creditor.

(d) Transactions resulting in acquisition of a non-current asset for another non-current assets, *e.g.*, exchange of one machinery for another machinery of the same value.

(*e*) Transactions resulting in replacement of one non-current liability by another non-current liability of the same amount, *e.g.*, conversion of debentures into shares.

(*f*) Transactions resulting in increase or decrease of both non-current assets and non-current liabilities of the same amount, *e.g.*, acquisition of plant by issue of shares or redemption of secured loan by foregoing the mortgaged property.

(2) Transactions which affect working capital—Sources and uses of funds

Now the question is : What transactions affect the amount of working capital, *i.e.*, result in increase of working capital (source, or inflow of funds) or decrease of working capital (application, use or outflow of funds) ? These transactions are as follows :

(*a*) *Transactions resulting in increase in a current asset and*

(*i*) *increase in a non-current liability, or*

(*ii*) *decrease in a non-current asset, e.g.*, receipt of cash on share capital or debentures or sale of a non-current asset, like building, for cash. This is a *source* of funds.

(*b*) *Transactions resulting in decrease in a current asset and*

(*i*) *decrease in a non-current liability, or*

(*ii*) *increase in a non-current asset, e.g.*, cash paid to redeem debentures, or cash paid to acquire land, equipment etc. This is an *application* of funds.

(*c*) *Transactions resulting in decrease in a current liability and*

(*i*) *increase in a non-current liability, or*

(*ii*) *decrease in a non-current asset, e.g*, conversion of short-term, liabilities (say, trade creditors) into long-term liabilities, say, debentures, or discharge of a creditor in exchange of plant. This is a *source* of funds.

(*d*) *Transactions resulting in a current liability and*

(*i*) *decrease in a non-current liability, or*

(*ii*) *increase in a non-current asset, e.g.*, conversion of a long-term loan into a short-term loan or acquisition of equipment etc. on a short-term credit. This is an *application* of funds.

The important conclusions from the above discussion are as follows :

1. Increase or decrease in funds, *i.e.*, working capital, takes place only when a transaction *affects both the current and non-current items, i.e.*, assets and liabilities in a balance sheet at the same time. This is very important.

2. Sources of funds are—

(*a*) decreases in non-current assets (accompanied by increase in a current asset or decrease in a current liability) or

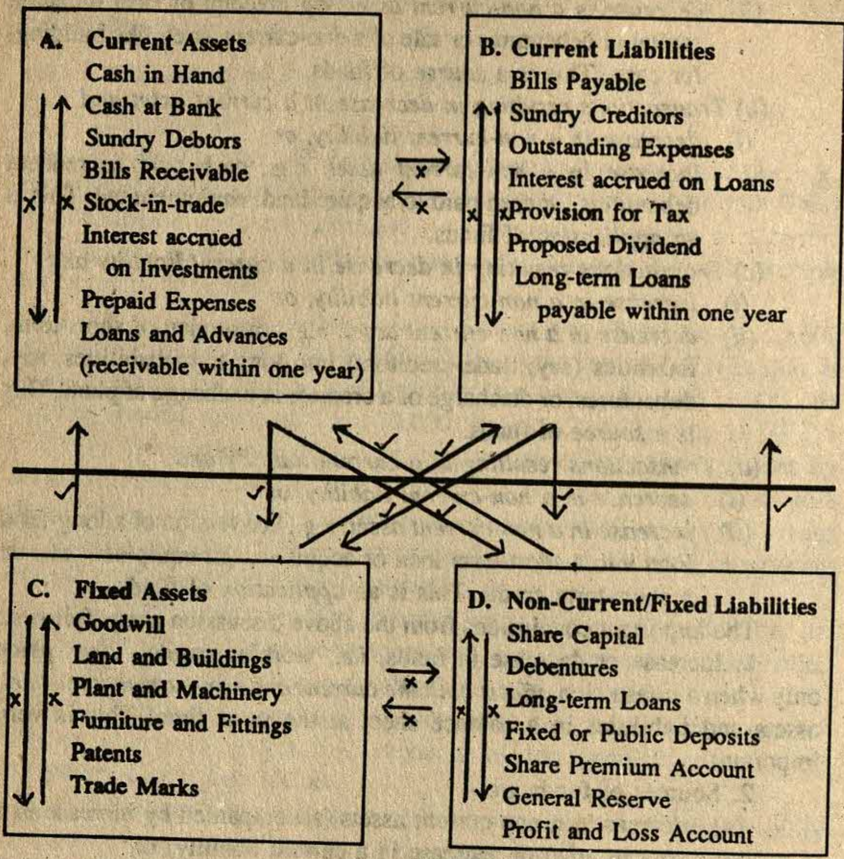
(*b*) increases in non-current liabilities (accompanied by decrease in a current liability or increase in a current asset).

3. Application of funds results form—

(*a*) increases in non-current assets (accompanied by a decrease in a current asset or an increase in a current liability)

(*b*) decreases in non-current liabilities (accompanied by an increase in a current liability or decrease in a current asset).

Chart Showing Flow of Fund (Working Capital)



'X' indicates—No flow of Fund
'✓' indicates—Flow of Fund

Illustration 1. State in each of the following cases whether the event (*a*) is a source of funds, (*b*) is a use of funds, (*c*) does not change fund :

(*i*) Cash paid to creditors ;
(*ii*) Cash received from debtors ;
(*iii*) Conversion of debentures into share capital ;
(*iv*) Purchase of machinery for cash ;
(*v*) Issue of share capital for cash ;
(*vi*) Purchase of furniture on 90 days' credit ;
(*vii*) Purchase of buildings in consideration of shares of purchasing company.

Solution :

(*i*) Payment of cash to creditors will affect cash and creditors. Both changes take place in current items. Therefore, there is no flow or change of funds.

(*ii*) Cash received from debtors increases cash and decreases debtors. It changes only the composition of current assets. Therefore, there is no change in the total figure of current assets. There is no flow of funds.

(*iii*) Conversion of debentures into share capital will increase the amount of share capital and decrease the amount of debentures issued. Both changes take place within non-current category. There is therefore no flow of funds. *As this is one of the important financial activities of the enterprise, this needs to be disclosed in the funds flow statement.*

(*iv*) Purchase of machinery for cash will increase a fixed asset and will decrease cash which is a current asset. It is a use of funds.

(*v*) Issue of shares in consideration of cash will increase share capital, a non-current liability as well as cash which is a current asset. Therefore, the transaction is a source of funds.

(*vi*) Purchase of furniture on short-term credit basis (90 days) will increase furniture, a fixed asset, and increase creditors, a current liability. This transaction results in use of funds.

(*vii*) Purchase of buildings in consideration of shares of purchasing company will change the balance in buildings account and the share capital account. Both changes take place within non-current category, and as such there is no flow of funds. *It is an important investment decision and hence should be disclosed in the funds flow statement.*

Funds flow statement may be prepared in

1. Horizontal Form, or
2. Vertical Form.

Horizontal Form

FUNDS FLOW STATEMENT

for the year ending . . . .

Sources	Rs.	*Uses*	Rs.
1. Funds from Operations		1. (*a*) Redemption of :	
Net Profit after tax		Preference Shares	
Add Non-Cash charges		Debentures	
2. (*a*) Issue of—Shares		(*b*) Repayment of long-term Loans	
—Debentures		2. Purchases of Fixed Assets	
(*b*) Raising of long-term Loans		3. Payment of Dividends :	
3. Sale of Fixed Assets		—Preference	
4. Other Receipts		—Equity	

The excess of sources of funds over uses of funds represents increase in net working capital whereas the excess of uses over sources will indicate decrease in net working capital.

Vertical Form

FUNDS FLOW STATEMENT

for the year ending ....

Sources	Rs.
1. Funds from Operations	
Net profit after tax	
Add Non-Cash Charges	
2. (*a*) Issue of—Shares	
—Debentures	
(*b*) Raising of long-term Loans	
3. Sale of Fixed Assets	
4. Other Receipts	

Uses	Rs.
1. (*a*) Redemption of	
—Preference Shares	
—Debentures	
(*b*) Repayment of long-term Loans	
2. Purchase of fixed assets	
3. Payment of Dividends :	
—Preference	
—Equity	

Increase/Decrease in Working Capital

Funds and Non-Cash Expenses/Charges

It has already been explained that "funds" should not be confused with "profit". A business making a huge profit in a period may have very little 'funds' at the end and a business suffering a loss may have a comfortable 'cash' or 'funds' position at the end because of trading operations.

For example, take the following Profit and Loss Account of a business for the year 1989-90 :

	Rs.	Rs.		Rs.
To Opening Stock	40,000		By Sales	6,15,000
Add				
Purchases	1,50,000			
	1,90,000			

(Contd.)

	Rs.	Rs.		Rs.
Less Closing Stock	35,000			
		1,55,000		
To Carriage		5,000		
To Wages		1,20,000		
To Manufacturing Expenses		50,000		
To Salaries		70,000		
To Office Expenses		40,000		
To Selling & Distribution Expenses		55,000		
To Depreciation		20,000		
To Net Profit		1,00,000		
		6,15,000		6,15,000

It would be noted from the Profit and Loss Account that payment for the following items has been made in cash or would be made, sooner or later, in cash :

		Rs.
Stock		1,55,000
Carriage		5,000
Wages		1,20,000
Manufacturing Expenses		50,000
Salaries		70,000
Office Expenses		40,000
Selling and Distribution Expenses		55,000
	Rs.	4,95,000

It may be noted carefully that *no cash payment has been or will be made for depreciation*. This is a *non-cash expense*. The other expenses (listed above) amounting to Rs. 4,95,000 absorb funds, *i.e.*, reduce the funds provided by sales. Depreciation does not reduce funds.

The funds generated by operations during 1989-90 therefore are Rs. 1,20,000 as shown below:

	Rs.
Sales (resulting in inflow of funds)	6,15,000
Expenses (resulting in outflow of funds)	4,95,000
Net *increase* in funds	1,20,000

The 'profit' during the year 1989-90 is Rs. 1,00,000 whereas increase in 'cash' or 'funds' is Rs. 1,20,000. Thus,

Cash/Funds flow = Profit + Depreciation

The following non-cash charges will also have to be *added* to the profit to determine the net inflow of funds from operations :

1. Fictitious items like discount on issue of shares or debentures, preliminary expenses and goodwill written off.
2. Amortization of non-current assets.
3. Losses from fire, floods or sale of properties and investments.
4. Appropriations made for dividends, debenture redemption fund, general reserves etc.

But as regards 'bad debts', this item is not to be added to the profit. Whereas no cash is required for the bad debts expense, the entry (debiting bad debts and crediting customer) does reduce the current asset "sundry debtors" and as a result working capital is also reduced.

If there is any gain on sale of non-current assets or any unusual income, like gain on speculation or dividends etc., these should be *deducted* from profit to find out the net inflow of funds from operations.

Illustration 2. From the following Profit and Loss Account of a trader, determine the amount of funds from business operations :

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.	Rs.		Rs.
To Salaries paid	40,000		By Gross Profit	3,00,000
Add outstanding	10,000	50,000	By Profit on sale of Plant and Equipments	12,000
To Cash expenses		12,000	By Interest received	3,000
To Depreciation		30,000		
To Loss on sale of Furniture		5,000		
To Net Profit		2,18,000		
		3,15,000		3,15,000

(*All India SSCE,1984*)

Solution :

CALCULATION OF FUNDS FROM OPERATIONS

	Rs.	Rs.
Net Profit as per Profit and Loss Account		2,18,000
Add Depreciation	30,000	
Loss on sale of Furniture	5,000	35,000
		2,53,000

	Rs.	Rs.
Less Profit on sale of		
Plant and Machinery	12,000	
Interest received	3,000	15,000
Funds from Operations		2,38,000

The illustration may also be worked out in the following manner :

Gross Profit		3,00,000
Less Salaries	50,000	
Cash expenses	12,000	62,000
Funds from Operations		2,38,000

Illustration 3. Calculate funds from operations from the following Profit and Loss Account :

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Depreciation	900	By Gross Profit	8,500
To Discount allowed	200	By Profit on sale of Plant	4,000
To Provision for Bad Debts	100		
To Loss on sale of Machine	400		
To Goodwill written off	200		
To Preliminary Expenses	650		
To Sundry Expenses	4,500		
To Net Profit	5,550		
	12,500		12,500

(Adapted from All India SSCE, 1979)

Solution :

CALCULATION OF FUNDS FROM OPERATIONS

		Rs.
Net Profit		5,550
	Rs.	
Add Depreciation	900	
Loss on sale of Machine	400	
Goodwill written off	200	
Preliminary Expenses written off	650	2,150
		7,700
Less Profit on sale of Plant		4,000
Funds from Operations		3,700

Illustration 4. From the following particulars, calculate funds from operations :

	Rs.
Net Loss	20,000
Depreciation on Machinery	50,000
Amortisation of Goodwill	5,000
Loss on sale of old Furniture	3,500
Profit on sale of Land	8,500
Provision for Bad Debts	2,500

Solution :

CALCULATION OF FUNDS FROM OPERATIONS

		Rs.
Net Loss	Rs.	−20,000
Add Depreciation on Machinery	50,000	
Amortisation of Goodwill	5,000	
Loss on sale of old Furniture	3,500	58,500
		38,500
Less Profit on sale of Land		8,500
Funds from Operations		30,000

Note : Provision for Bad Debt is a business expense.

Illustration 5. Calculate the 'Funds from Operations' from the information given below as on 31st March, 1989 :

(i) Net Profit for the year ended 31st March, 1989 Rs. 6,50,000.
(ii) Gain on the sale of Building 35,500.
(iii) Goodwill appears in the books at Rs. 1,80,000. Out of that 10 per cent has been written off during the year.
(iv) Old Machinery worth Rs. 8,000 has been sold for Rs. 6,500 during the year.
(v) Rs. 1,25,000 have been transferred to the General Reserve.
(vi) Depreciation has been provided during the year on Machinery and Furniture at 20% whose total cost is Rs. 6,50,000

(Adapted from All India SSCE, 1983)

Solution :

CALCULATION OF FUNDS FROM OPERATIONS

		Rs.
Net Profit for the year ending 31st March, 1989		6,50,000
	Rs.	
Add Goodwill written off	18,000	
Loss on sale of old Machinery	1,500	
Transfer to General Reserve	1,25,000	

(Contd.)

	Rs.	Rs.
Depreciation on Machinery and Furniture	1,30,000	2,74,500
		9,24,500
Less Gain on sale of Building		35,500
Funds from Operations		8,89,000

Illustration 6. Calculate Funds from Operations' from the following Income Statement :

INCOME STATEMENT

	Rs.		Rs.
To Rent paid	25,000	By Gross Income	5,00,000
To Salaries paid	1,00,000	By Vehicle Account—	
To Provision for Depreciation	50,000	Profit on sale	3,000
To Commission	5,000	By Refund of Tax	2,000
To Provision for Tax	1,50,000	By Dividends received	10,000
To Provision for Doubtful Debts	3,000		
To Loss on sale of Investments	10,000		
To Cost of Issue of Shares written off	2,000		
To Provision for Legal Damages	5,000		
To Net Income	1,65,000		
	5,15,000		5,15,000

(*Adapted from Delhi SSCE, Comptt. 1979*)

Solution :

CALCULATION OF FUNDS FROM OPERATIONS

	Rs.	Rs.
Net Income		1,65,000
Add Provision for Depreciation	50,000	
Loss on sale of Investments	10,000	
Cost of Issue of Shares	2,000	62,000
		2,27,000
Less Profit on sale of Vehicle	3,000	
Refund of Tax	2,000	
Dividends received	10,000	15,000
Funds from Operations		2,12,000

Illustration 7. Calculate the amount of funds from trading operations from the details given below :

PROFIT AND LOSS ACCOUNT

	Rs.	Rs		Rs.
To Salaries	1,50,000		By Gross Profit b/d	6,00,000
Add Outstanding	24,000	1,74,000	By Commission received	30,000
To Rent, Rates and Taxes		80,000	By Discount received from Suppliers	25,000
To Insurance	45,000		By Rent recd. from tenants	60,000
Less prepaid	5,000	40,000	By Profit from sale of Land	1,15,000
To Depreciation on :				
Plant and Machinery	22,500			
Furniture and Fittings	4,000			
Motor Cars	40,000	66,500		
To Printing & Stationery		13,000		
To Advertising		21,000		
To Travelling Expenses		34,000		
To Discount allowed to Customers		4,000		
To Provision for Bad Debts		12,000		
To Provision for Income Tax		2,00,000		
To Discount on Issue of Debentures written off		2,500		
To Underwriting Commission on Issue of Shares written off		6,000		
To General Reserve		25,000		
To Proposed Dividend :				
Preference		26,000		
Equity		40,000		
To Balance c/d		86,000		
		8,30,000		8,30,000

Solution :

CALCULATION OF FUNDS FROM TRADING OPERATIONS

	Rs.	Rs.
Net Profit		86,000
Add Transfer to General Reserve	25,000	
Proposed Dividends :		
Preference	26,000	
Equity	40,000	91,000
Depreciation on :		
Plant & Machinery	22,500	
Furniture & Fittings	4,000	
Motor Cars	40,000	66,500
Discount on Issue of Debentures written off		2,500
Underwriting Commission on Issue of Shares written off		6,000
		2,52,000
Less Rent received from tenants	60,000	
Profit from sale of Land	1,15,000	1,75,000
Funds from Trading Operations		77,000

The Illustration may be solved in the following manner also :

	Rs.	Rs.
Gross Profit		6,00,000
Add Commission received	30,000	
Discount received	25,000	55,000
		6,55,000
Less Salaries	1,74,000	
Rent, Rates & Taxes	80,000	
Insurance	40,000	
Printing & Stationery	13,000	
Advertising	21,000	
Traveling Expenses	34,000	
Discount allowed to Customers	4,000	
Provision for Bad Debts	12,000	
Provision for Income Tax	2,00,000	5,78,000
Funds from Trading Operations		77,000

Illustration 8. The following are the summarised Balance Sheets of Elite Industries Ltd. as at 31st March 1989 and 1990 :

Liabilities	March 31, 1989	March 31, 1990	*Assets*	March 31, 1989	March 31, 1990
	Rs.	Rs.		Rs.	Rs.
12% Redeemable Preference Share Capital	—	8,000	Goodwill	11,000	8,000
Equity Share Capital	40,000	40,000	Plant and Machinery	30,000	32,000
Share Premium Account	—	2,000	Debtors	20,000	24,000
General Reserve	2,000	2,000	Stock	30,000	35,000
Profit and Loss Account	1,000	1,200	Cash	300	500
11% Debentures	6,000	7,000	Prepaid Expenses	1,200	3,500
Provision for Depreciation	11,000	15,000			
Creditors	12,000	11,000			
Bank Overdraft	3,000	4,200			
Provision for Taxation	5,000	5,800			
Proposed Dividend	12,500	6,800			
	92,500	1,03,000		92,500	1,03,000

Your are required to prepare :

(*i*) Statement showing changes in the working capital ;

(*ii*) Statement of sources and application of funds.

(Adapted from All India SSCE, 1988)

Working Notes:

(*i*)

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Proposed Dividend	6,800	By Balance b/fd	1,000
To Balance c/d	1,200	By Net Profit for the year (*Balancing figure*)	7,000
	8,000		8,000

(ii) Calculation of Funds from Operations

		Rs.
Net Profit for the year		7,000
Add	Depreciation on Plant & Machinery	4,000
	Goodwill written off	3,000
		14,000

STATEMENT SHOWING CHANGES IN WORKING CAPITAL

	March 31, 1989	March 31, 1990	Increase in Working Capital	Decrease in Working Capital
	Rs.	Rs.	Rs.	Rs.
Current Assets :				
Debtors	20,000	24,000	4,000	
Stock	30,000	35,000	5,000	
Cash	300	500	200	
Prepaid Expenses	1,200	3,500	2,300	
(*a*)	51,500	63,000		
Current Liabilities :				
Creditors	12,000	11,000	1,000	
Bank Overdraft	3,000	4,200		1,200
Provision for Taxation	5,000	5,800		800
(*b*)	20,000	21,000	12,500	2,000
Working Capital (*a*) – (*b*)	31,500	42,000		

Net Increase in Working Capital = Rs. 42,000 – Rs. 31,500
= Rs. 10,500

STATEMENT OF SOURCES AND APPLICATION OF FUNDS
for the year ending 31st March, 1990

Sources	Rs.	*Applications*	Rs.
Issue of 12% Redeemable Preference Shares	10,000	Purchase of Plant & Machinery	2,000
Issue of 11% Debentures	1,000	Payment of Dividend	12,500
Funds from Operations	14,000	Net increase in Working Capital	10,500
	25,000		25,000

Illustration 9. From the following Balance Sheets of a company, prepare a funds flow statement :

	31st March, 1989 Rs.	31st March, 1990 Rs.
Assets		
Goodwill	5,000	10,000
Land	2,80,000	1,56,000
Long-term Investments	10,000	15,000
Closing Stock	1,20,000	87,000
Accounts Receivable	90,000	98,000
Cash	70,000	25,000
	5,75,000	3,91,000
Liabilities		
Share Capital	1,50,000	1,25,000
Profit and Loss Account	2,65,000	1,96,000
Loan (payable on 31-12-1990)	80,000	—
Bills Payable	35,000	20,000
Creditors	45,000	50,000
	5,75,000	3,91,000

(*All India SSCE, 1986, Modified*)

Solution :

SCHEDULE OF CHANGES IN WORKING CAPITAL

	March 31, 1990 Rs.	March 31, 1989 Rs.	Working Capital Increase Rs.	Decrease Rs.
Current Assets :				
Closing Stock	1,20,000	87,000	33,000	
Accounts Receivable	90,000	98,000		8,000
Cash	70,000	25,000	45,000	
(*a*)	2,80,000	2,10,000		
Current Liabilities :				
Loans (payable on 31-12-1990)	80,000	—		80,000
Bills Payable	35,000	20,000		15,000
Creditors	45,000	50,000	5,000	
(*b*)	1,60,000	70,000	83,000	1,03,000

Working Capital

(*a*) − (*b*)	1,20,000	1,40,000

Net decrease in Working Capital = Rs. 1,40,000 − Rs. 1,20,000
= Rs. 20,000

FUNDS FLOW STATEMENT
for the year ending 31st March, 1990

Sources	Rs.	*Uses*	Rs.
Funds from Trading Operations	74,000	Purchase of Land	1,24,000
Issue of Shares	25,000		
Sale proceeds of Long-term Investments	5,000		
Net decrease in Working Capital	20,000		
	1,24,000		1,24,000

Working Note :

PROFIT AND LOSS ACCOUNT

Dr. Cr.

	Rs.		Rs.
To Goodwill written off	5,000	By Balance b/fd	1,96,000
To Balance c/d	2,65,000	By Net Profit for the year (*Balancing figure*)	74,000
	2,70,000		2,70,000

Illustration 10. The following are the Balance Sheets of M/s Modern Ltd. as at :

Liabilities	March 31, 1989	March 31, 1990	*Assets*	March 31, 1990	March 31, 1990
	Rs.	Rs.		Rs.	Rs.
Equity Share Capital	4,80,000	7,20,000	Factory Buildings	2,40,000	1,20,000
13.5% Redeemable Preference Share Capital	2,40,000	1,20,000	Machinery	2,16,000	4,58,400
General Reserve	48,000	72,000	Fixed Deposits with Syndicate Bank (Maturity 30.6.1992)	1,32,000	1,70,400
Profit and Loss Account	43,200	64,800	Stock	2,04,000	1,87,200
			Sundry Debtors	1,80,000	2,59,200
Bills Payable	14,000	27,200	Cash	10,200	17,200

(*Contd.*)

	Rs.	Rs.		Rs.	Rs.
Sundry Creditors	70,000	1,00,000	Cash at Bank	30,600	50,000
Outstanding Salaries	19,200	14,400	Preliminary Expenses	24,000	16,800
Provision for Taxation	67,200	76,800	Discount on Issue of Shares	12,000	9,600
Proposed Dividend	67,200	93,600			
	10,48,800	12,88,800		10,48,800	12,88,800

You are required to prepare

(*i*) Schedule of Changes in Working Capital ;

(*ii*) Funds Flow Statement.

(*Adapted from All India SSCE, 1989*)

Working Notes :

(*i*)

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To General Reserve	24,000	By Balance b/fd	43,200
To Proposed Dividend	93,600	By Net Profit for the year (*Balancing figure*)	1,39,200
To Balance c/d	64,800		
	1,82,400		1,82,400

(*ii*) *Calculation of Funds from Trading Operation :*

Net Profit for the year	1,39,200
Add Preliminary Expenses written off	7,200
Discount on Issue of Shares written off	2,400
	1,48,800

SCHEDULE OF CHANGES IN WORKING CAPITAL

	March 31, 1989	March 31, 1990	Working Capital Increase	Working Capital Decrease
	Rs.	Rs.	Rs.	Rs.
Current Assets :				
Stock	2,04,000	1,87,200		16,800
Sundry Debtors	1,80,000	2,59,200	79,200	
Cash in Hand	10,200	17,200	7,000	
Cash at Bank	30,600	50,000	19,400	
(*a*)	4,24,800	5,13,600		

(*Contd.*)

	Rs.	Rs.	Rs.	Rs.
Current Liabilities :				
Bills Payable	14,000	27,200		13,200
Sundry Creditors	70,000	1,00,000		30,000
Outstanding Salaries	19,200	14,400	4,800	
Provision for Taxation	67,200	76,800		9,600
(*b*)	1,70,400	2,18,400	1,10,400	69,600

Working Capital
(*a*) – (*b*) 2,54,400 2,95,200
Net increase in Working Capital = Rs. 1,10,400 – Rs. 69,600
= Rs. 40,800

FUNDS FLOW STATEMENT
for the year ending 31st March, 1990

Sources	Rs.	*Uses*	Rs.
Issue of Equity Share Capital as per working note No. (*ii*)	2,40,000	Redemption of 13.5% Redeemable Preference Share Capital	1,20,000
Funds from Operations	1,48,800	Purchase of Machinery	2,42,400
Sale Proceeds of Factory Buildings	1,20,000	Fixed Deposits with Syndicate Bank	38,400
		Payment of Dividend for 1988-89	67,200
		Net increase in Working Capital	40,800
	5,08,800		5,08,800

Illustration 11. The summarised Balance Sheets of Ayushi Ltd. are as follows :

	March 31, 1989	March 31, 1990		March 31, 1989	March 31, 1990
	Rs.	Rs.		Rs.	Rs.
Share Capital	5,00,000	5,00,000	Fixed Assets	3,00,000	4,00,000
Capital Reserve	—	5,000	Current Assets	5,00,000	4,05,000
Profit and Loss Account	1,00,000	1,50,000			
12% Debentures	1,00,000	—			
Current Liabilities	1,00,000	1,50,000			
	8,00,000	8,05,000		8,00,000	8,05,000

Debentures were redeemed at a discount of 5%.
You are required to prepare Funds Flow Statement.

Solution :

FUNDS FLOW STATEMENT
for the year ending 31st March, 1990

Sources	Rs.	*Uses*	Rs.
Funds from Operations	50,000	Redemption of 12% Debentures at a discount of 5% (Rs. 1,00,000 – Rs. 5,000)	95,000
Net Decrease in Working Capital	1,45,000	Purchase of Fixed Assets	1,00,000
	1,95,000		1,95,000

Illustration 12. From the following information relating to BR. Co. Ltd., you are required to prepare a Schedule of Working Capital Changes over the year 1989-90 :

Assets	1.4.1989 Rs.	31.3.1990 Rs.
Land	50,000	60,000
Building	1,00,000	1,20,000
Machinery	1,40,000	1,40,000
Stock	40,000	35,000
Cash	58,400	88,900
Goodwill	25,000	25,000
Bills Receivable	5,000	7,000
Long-term Investments	20,000	15,000
Trade Debtors	18,000	22,000
Prepaid Expenses	500	700
Equipment	5,500	7,500
	4,62,400	5,21,100

Liabilities	Rs.	Rs.
Debentures	1,25,000	1,40,000
Bills Payable	3,200	2,000
Accrued Expenses	200	100
Trade Creditors	10,000	9,000
Income-tax Payable	4,000	5,000
Share Capital	2,50,000	3,00,000
12% Mortgage Loan	40,000	25,000
Profit and Loss Appropriation	30,000	40,000
	4,62,400	5,21,100

Solution :

STATEMENT OF SOURCES AND APPLICATION OF FUNDS
for the year ended 31st March, 1990

Sources	Rs.	*Application*	Rs.
Issue of Share Capital	50,000	Purchase of Fixed Assets :	
Issue of Debentures (1,40,000 – 1,25,000)	15,000	Land (60,000 – 50,000)	10,000
Sale Proceeds of Long-term Investments (20,000 – 15,000)	5,000	Building (1,20,000 –1,00,000)	20,000
Funds from Trading Operation (40,000 – 30,000)	10,000	Equipment (7,500 – 5,500)	2,000
		Redemption of Mortgaged Loan (40,000 – 25,000)	15,000
		Increase in Working Capital	33,000
	80,000		80,000

This Statement may also be prepared in the following manner :

FUNDS FLOW STATEMENT
for the year ended 31st March, 1990

	Rs.	Rs.
Funds provided by :		
Operations	10,000	
Sale of Long-term Investments	5,000	
Issue of Share Capital	50,000	
Issue of Debentures	15,000	
		80,000
Funds applied to :		
Purchase of :		
Land	10,000	
Building	20,000	
Equipment	2,000	
Redemption of Debentures	15,000	47,000
Increase in Working Capital		33,000

Note : If there is a decrease in working capital, application of funds should be shown first.

Illustration 13. The Balance Sheets of Cheerful Ltd. as at 31st March, 1989 and 31st March, 1990 are as follows :

Liabilities	March 31, 1989 Rs.	March 31, 1990 Rs.	*Assets*	March 31, 1989 Rs.	March 31, 1990 Rs.
Equity Share Capital (Shares of Rs. 10 each, fully paid up)	7,00,000	9,50,000	Goodwill	70,000	35,000
			Plant and Machinery	5,69,000	6,60,500
			Furniture and Fixtures	40,000	36,000
14% Redeemable Preference Shares	2,00,000	80,000	Investments	2,00,000	2,60,000
			Stock	1,47,000	2,01,000
Share Premium Account	22,000	37,000	Debtors	2,53,000	3,17,000
			Cash at Bank	80,000	1,74,000
General Reserve	70,000	90,000	Bills Receivable	20,000	32,000
Profit and Loss Amount	1,00,000	2,30,000	Prepaid Insurance	3,000	4,500
1,000 12.5% Convertible Debentures of Rs. 100 each, fully paid up	1,00,000	-	Prepaid Rent	10,000	17,000
Current Liabilities	2,00,000	3,50,000			
	13,92,000	17,37,000		13,92,000	17,37,000

During 1989-90, the company

(*i*) offered conversion of 1,000 12.5% Convertible Debentures of Rs. 100 each, fully paid up into 10,000 Equity Shares of Rs. 10 each at par. All the debenture-holders opted for this conversion.

(*ii*) allotted 15,000 Equity Shares of Rs. 10 each at a premium of Re. 1 per share to vendors for purchase of Plant and Machinery.

You are required to prepare (*i*) Statement of Sources and Application of Funds (*ii*) Schedule of Changes in Working Capital.

Working Notes :

(*i*)

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To General Reserve	20,000	By Balance b/fd	1,00,000
To Balance c/d	2,30,000	By Net Profit for the year (*Balancing figure*)	1,50,000
	2,50,000		2,50,000

(ii) Calculation of depreciation on Plant and Machinery :

Dr. PLANT AND MACHINERY ACCOUNT Cr.

	Rs.		Rs.
To Balance b/fd	5,69,000	By Depreciation	73,500
To Vendors	1,65,000	*(Balancing figure)*	
		By Balance c/d	6,60,500
	7,34,000		7,34,000

(iii) Calculation of Funds from Operations :

	Rs.	Rs.
Net Profit for the year		1,50,000
Add Depreciation on :		
Plant and Machinery	73,500	
Furniture	4,000	77,500
Goodwill written off		35,000
		2,62,500

SCHEDULE OF CHANGES IN WORKING CAPITAL

	March 31, 1989	March 31, 1990	Working Capital Increase	Working Capital Decrease
			Rs.	Rs.
Current Assets :				
Stock	1,47,000	2,01,000	54,000	
Debtors	2,53,000	3,17,000	64,000	
Cash at Bank	80,000	1,74,000	94,000	
Bills Receivable	20,000	32,000	12,000	
Prepaid Insurance	3,000	4,500	1,500	
Prepaid Rent	10,000	17,000	7,000	
(a)	5,13,000	7,45,500		
Current Liabilities	2,00,000	3,50,000		1,50,000
(b)			2,32,500	1,50,000
Working Capital (a) – (b)	3,13,000	3,95,500		

Net Increase in working capital = Rs. 2,32,500 – Rs. 1,50,000

= Rs. 82,500

FUNDS FLOW STATEMENT
for the year ending 31st March, 1990

Sources	Rs.	*Uses*	Rs.
Issue of Equity Shares including Premium	2,65,000	Purchase of Plant and Machinery	1,65,000
Funds from Operations	2,62,500	Redemption of 14% Redeemable Preference Shares	1,20,000
		Redemption of 12.5 Convertible Debentures	1,00,000
		Purchase of Investments	60,000
		Net Increase in Working Capital	82,500
	5,27,500		5,27,500

Illustration 14. The following are the Balance Sheets of 'Quick Return Corporation' as on 31st March, 1988 and 1989 :

Liabilities	31st March, 1988 Rs.	31st March, 1989 Rs.	*Assets*	31st March, 1988 Rs.	31st March, 1989 Rs.
Share Capital	90,000	1,11,000	Bank	15,000	18,000
Accounts Payable	60,000	54,000	Accounts Receivable	42,000	42,000
Outstanding Expenses	6,000	12,000	Inventory	66,000	24,000
Income-tax Payable	3,000	3,300	Prepaid Rent	450	300
Retained Earnings	37,950	40,950	Prepaid Insurance	600	750
			Prepaid Property Tax	900	1,200
			Land	12,000	24,000
			Building and Equipment	90,000	1,44,000
			* Accumulated Depreciation	(30,000)	(33,000)
	1,96,950	2,21,250		1,96,950	2,21,250

You are required to prepare a Schedule of Changes in Working Capital and a Statement of Flow of Funds.

Note : Figures within brackets show "decreases".

(*Adapted from All India SSCE, 1985*)

Solution :

SCHEDULE OF CHANGES IN WORKING CAPITAL

	March 31, 1989	March 31, 1990	Working Capital Increase	Working Capital Decrease
			Rs.	Rs.
Current Assets :				
Bank	15,000	18,000	3,000	...
Accounts Receivable	42,000	42,000	...	...
Inventory	66,000	24,000	...	42,000
Prepaid Rent	450	300	...	150
Prepaid Insurance	600	750	150	...
Prepaid Property Tax	900	1,200	300	...
(*a*)	1,24,950	86,250		
Current Liabilities :				
Accounts Payable	60,000	54,000	6,000	...
Outstanding Expenses	6,000	12,000	...	6,000
Income-tax Payable	3,000	3,300	...	300
(*b*)	69,000	69,300	9,450	48,450
(*a*) – (*b*)	55,950	16,950		

Net Decrease in Working Capital = Rs. 9,450 – Rs. 48,450
= Rs. 39,000

FUNDS FLOW STATEMENT
for the year ending 31st March, 1989

Sources	Rs.	*Uses*	Rs.
Issue of Shares	21,000	Purchase of Land	12,000
Funds from Trading Operations	6,000	Purchase of Building and Equipment	54,000
Net Decrease in Working Capital	39,000		
	66,000		66,000

Working Notes :

(*i*) *Calculation of Funds from Trading Operations :*

	Rs.
Increase in Retained Earnings (Rs. 40,950 – Rs. 37,950)	3,000
Add Increase in Accumulated Depreciation (Rs. 33,000 – Rs. 30,000)	3,000
Funds from Trading Operations	6,000

Illustration 15. The Balance Sheets of Banstead Products Limited for the years ended 31st March, 1989 and 31st March, 1990 are as follows :

	March 31, 1989 Rs.	*March 31, 1990* Rs.
Equity Share Capital	80,000	1,20,000
Share Premium	8,000	12,000
General Reserve	6,000	9,000
Profit and Loss Account	19,500	20,800
14% Debentures	—	26,000
Income-tax	9,800	10,900
Creditors	33,500	36,400
	1,56,800	2,35,100
Freehold Premises	55,400	1,13,200
Plant and Machinery	35,600	51,300
Furniture and Fixtures	2,400	1,500
Stock	22,100	26,000
Debtors	36,500	39,100
Bank Balance	4,800	4,000
	1,56,800	2,35,100

Depreciation written off during the year 1989-90 was as follows :

	Rs.
Plant and Machinery	12,800
Furniture and Fixtures	400

Prepare a Statement of Sources and Applications of Funds. (*D.U.*)

Solution :

Banstead Products Ltd.
STATEMENT OF SOURCES AND APPLICATION OF FUNDS
for the year ending 31st March, 1990

Sources		Rs.	*Application*	Rs.
Profit earned during 1989-90 (Increase)	Rs. 1,300		Purchase of Freehold Premises	57,800
Add Non-Cash Charges :			Purchase of Plant and Machinery	28,500
Depreciation	13,200		Increase in Working Capital	1,700
Increase in General Reserve	3,000			
		17,500		
Issue of Shares		40,000		
Proceeds from Premium		4,000		
Issue of 14% Debentures		26,000		
Sale of Furniture & Fixtures		500		
		88,000		88,000

Working notes :

STATEMENT OF CHANGES IN WORKING CAPITAL

	March 31, 1989	March 31, 1990	Working Capital Increase	Working Capital Decrease
	Rs.	Rs.	Rs.	Rs.
Income-tax	9,800	10,900		1,100
Creditors	33,500	36,400		2,900
Stock	22,100	26,000	3,900	
Debtors	36,500	39,100	2,600	
Bank Balance	4,800	4,000		800
			6,500	4,800

Increase in Working Capital = Rs. 6,500-4,800
= Rs. 1,700

Dr. FURNITURE AND FIXTURES ACCOUNT Cr.

		Rs.			Rs.
1989 April 1	To Balance b/d	2,400	1990 Mar. 31	By Depreciation (given)	400
				By Cash (Sale generating funds)	500
				By Balance c/d	1,500
		2,400			2,400

Dr. PLANT AND MACHINERY ACCOUNT Cr.

		Rs.			Rs.
1989 April 1	To Balance b/d	35,600	1990 Mar. 31	By Depreciation	12,800
	To Cash Purchase (implying use of funds)	28,500		By Balance c/d	51,300
		64,100			64,100

GAIN OR LOSS ON THE SALE OF FIXED ASSETS

The difference between the book value and the realised value of a fixed asset is gain or loss on its sale. This gain or loss is always included into the net income of the business. While preparing Funds Flow Statement, we are concerned not so much with the gain or loss on the transaction but the amount received for working capital. If the gain or loss is included in

the working capital, it must be excluded from the funds received from operation. The point can be clarified with the help of an Illustration.

Illustration 16. The net income of a business is Rs. 24,000 and a fixed asset of the value of Rs. 14,000 was sold for Rs. 18,000. Find out—

(*a*) the gain on the transaction , and

(*b*) the amount of working capital generated.

Also point out the adjustment to be made in the income of the business.

Solution :

(*a*) The gain on the transaction is :

Rs. 18,000 – Rs. 14,000 = Rs. 4,000.

(*b*) Cash, Rs. 18,000, is generated as working Capital.

If the gain is included in the net income of the business, it must be excluded from it. If this is not done, it would mean that funds of Rs. 22,000 (Rs. 18,000 + 4,000) have been generated while Working Capital has increased by only Rs. 18,000.

HIDDEN TRANSACTIONS

Where a person concerned with the preparation of a funds flow statement can refer to the records of the business, there is no problem of hidden transactions because he can find the actual position from the records and do the needful. But an external analyst will have to cull out the needed information from the published statements and the accompanying schedules. For example, some fixed asset may have been acquired during the year or a part of it might have been acquired during the year or a part of it might have been disposed of. This information may not be readily available. But by sorting out the information given, the missing information may be found out. The following Illustration will clarify the point.

Illustration 17. A Ltd. purchased Plant and Machinery costing Rs. 1,70,000 during the financial year ending 31st March, 1990. The relevant extracts of Balance Sheets as at 31st March, 1989 and at 31st March, 1990 were as follows :

	1.4. 1989	31.3. 1990
	Rs.	Rs.
Plant and Machinery	1,55,000	2,80,000
Less Provision for Depreciation	85,000	1,25,000

The company's Profit and Loss Account for the year ending 31st March, 1990 included the following items :

	Rs.
Provision for Depreciation on Plant and Machinery	60,000
Profit on sale of Plant and Machinery	30,000

Calculate the cost of the Plant and Machinery that was sold during the financial year ending 31st March, 1990 and the total amount received from the sale of Plant and Machinery.

Solution :

In order to calculate the cost of the Plant and Machinery sold and the sale proceeds of the Plant and Machinery sold, the following ledger accounts will be prepared :

Dr. PLANT AND MACHINERY ACCOUNT Cr.

1989		Rs.	1989-90		Rs.
Apr. 1	To Balance b/fd	1,55,000	?	By Plant and Machinery	
1989-90 ?	To Bank (Plant purchased)	1,70,000	1990	Disposal	45,000
				By Balance c/d	2,80,000
		3,25,000			3,25,000
1990					
Apr. 1	To Balance b/d	2,80,000			

Dr. PROVISION FOR DEPRECIATION Cr.

1989-90		Rs.	1989		Rs.
?	To Plant and Machinery Disposal A/c	20,000	Apr. 1	By Balance b/fd	85,000
1990			1990 Mar. 31	By Profit and Loss Account (Depreciation)	60,000
Mar. 31	To Balance c/d	1,25,000			
		1,45,000			1,45,000
			1990		
			Apr. 1	By Balance b/d	1,25,000

Dr. PROVISION FOR DEPRECIATION Cr.

1989-90		Rs:	1989-90		Rs.
?	To Plant and Machinery (Cost of Machinery sold)	45,000	?	By Provision for Depreciation (Depreciation on Plant and Machinery sold)	20,000
?	To Profit & Loss A/c (Profit on Plant and Machinery sold)	30,000	?	By Bank (*Balancing figure*)	55,000
		75,000			75,000

Illustration 18. Machinery and Accumulated Depreciation Accounts appear in the Balance Sheets of XY & Co. Ltd. as on 31st March, 1989 and 31st March, 1990 as follows :

	March 31, 1989	March 31, 1990
	Rs.	Rs.
Machinery	16,000	40,000
Accumulated Depreciation	9,000	7,000

The following additional information is also available :

(1) A Machine costing Rs. 8,000 was acquired during the year by issue of equity shares.

(2) On April 1, 1989 a Machine costing Rs. 8,400 (with an accumulated depreciation of Rs. 5,000) was sold for Rs. 2,000.

During the year 1989-90, what is—

(*a*) provision for depreciation,

(*b*) source and application of funds,

(*c*) inflow of funds from operations, if the profit shown by Profit and Loss Account is Rs. 10,000 ?

Solution :

ACCUMULATED DEPRECIATION ACCOUNT

		Rs.			Rs.
	To Machinery A/c (Transfer of Accumulated Depreciation on Machine which is sold)	5,000	1989 Apr. 1	By Balance b/d	9,000
1990 Mar. 31	To Balance c/d	7,000		By Adjusted Profit & Loss Account (*Balancing figure*—being current provision of depreciation)	3,000
		12,000			12,000

Current provision for depreciation is Rs. 3,000.

MACHINERY ACCOUNT

		Rs.			Rs.
1989 Apr. 1	To Balance b/fd	16,000		By Bank (Sale Proceeds)	2,000
	To Equity Share Capital	8,000		By Accumulated Depreciation (Transfer)	5,000
	To Bank (*Balancing figure*—representing acquisition)	24,400		By Adjusted Profit and Loss Account (Loss on Sale)	1,400
			1990 Mar. 31	By Balance c/d	40,000
		48,400			48,400

The above transactions may also be shown in the following way :

Dr. **MACHINERY ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
1989 April 1	To Balance b/fd	16,000		By Machinery Disposal A/c	8,400
	To Equity Share Capital	8,000	1990		
	To Bank (Purchase)	24,400	Mar. 31	By Balance c/d	40,000
		48,400			48,400

Dr. **ACCUMULATED DEPRECIATION ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
	To Machinery Disposal A/c (Depreciation on Machinery sold)	5,000	1989 April 1	By Balance b/fd	9,000
	To Balance c/d	7,000		By Profit and Loss Account (Annual Depreciation)	3,000
		12,000			12,000

Dr. **ACCUMULATED DEPRECIATION ACCOUNT** Cr.

Date	Particulars	Rs.	Date	Particulars	Rs.
	To Machinery A/c	8,400		By Accumulated Depreciation Account	5,000
				By Bank	2,000
				By Profit and Loss Account (Loss on sale)	1,400
		8,400			8,400

Source and application of funds in respect of machinery is Rs. 10,000 including equity shares issued and Rs. 32,400 respectively.

(*c*) The inflow of funds from operation will be Rs. 10,000 + Rs. 3,000 + Rs. 1,400 = Rs. 14,400.

Illustration 19. From the following Balance Sheets of ABC Ltd., you are required to prepare

(i) a statement of sources and uses of funds ;
(ii) a schedule of changes in working capital

BALANCE SHEETS as on . . . .

Liabilities	31st March, 1989	31st March, 1990	*Assets*	31st March, 1989	31st March, 1990
Equity Share Capital	1,00,000	1,25,000	Goodwill	30,000	25,000
12% Redeemable Preference Share Capital	50,000	40,000	Plant and Machinery	75,000	1,10,000
General Reserve	15,000	17,500	Debtors	45,000	50,000
Profit and Loss Account	32,500	37,500	Bills Receivable	17,500	2,500
Bills Payable	10,000	5,000	Stock	37,500	40,000
Creditors	30,000	35,000	Cash	12,500	17,500
			Underwriting Commission	20,000	15,000
	2,37,500	2,60,000		2,37,500	2,60,000

Additional Information :

(i) Depreciation of Rs. 5,000 has been charged on Plant and Machinery ;
(ii) Machinery amounting to Rs. 50,000 was sold for Rs. 49,400.

Solution :

SCHEDULE OF CHANGES IN WORKING CAPITAL

	March 31, 1989	March 31, 1990	Working Capital Increase	Working Capital Decrease
			Rs.	Rs.
Current Assets :				
Debtors	45,000	50,000	5,000	
Bills Receivable	17,500	2,500		15,000
Stock	37,500	40,000	2,500	
Cash	12,500	17,500	5,000	
(a)	1,12,500	1,10,000		
Current Liabilities :				
Bills Payable	10,000	5,000	5,000	
Creditors	30,000	35,000		5,000
(b)	40,000	40,000	17,500	20,000
Working Capital (a) – (b)	72,500	70,000		

Net Decrease in Working Capital = Rs. 72,500 − Rs. 70,000 = Rs. 2,500

Working Notes:

(*i*)

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To General Reserve	2,500	By Balance b/fd	32,500
To Balance c/d	37,500	By Net Profit for the year (*Balancing Figure*)	7,500
	40,000		40,000

(*ii*) *Calculation of Funds from Trading Operations*

	Rs.
Net Profit for the year	7,500
Add Goodwill written off	5,000
Underwriting Commission written off	5,000
Depreciation on Plant & Machinery	5,000
Loss on sale of Plant & Machinery	600
	23,100

(*iii*) *Calculation of Purchase or Sale of Machienery :*

Dr. PLANT AND MACHINERY ACCOUNT Cr.

	Rs.		Rs.
To Balance b/fd	75,000	By Bank	49,400
To Bank (Purchases)	90,000	By Profit and Loss A/c	600
		By Depreciation	5,000
		By Balance c/d	1,10,000
	1,65,000		1,65,000

FUNDS FLOW STATEMENT
for the year ending 31st March, 1990

Sources	Rs.	*Uses*	Rs.
Issue of Shares	25,000	Redemption of 12% Redeemable Preference Shares	10,000
Funds from Trading Operations	23,100	Purchase of Plant and Machinery	90,000
Sale Proceeds of Plant and Machinery	49,400		
Net Decrease in Working Capital	2,500		
	1,00,000		1,00,000

Illustration 20. From the following Balance Sheets of M/s Hastinapur Ltd., prepare Funds Flow Statement and Statement of Changes in Working Capital :

Assets	1st April, 1989	31st March 1990
	Rs.	Rs.
Goodwill	10,000	—
Other Fixed Assets	1,40,000	1,70,000
Short-term Investments	10,000	—
Other Current Assets	1,50,000	1,52,000
Miscellaneous Expenditure (to the extent not written off)	25,000	15,000
	3,35,000	3,37,000
Liabilities		
Share Capital	1,10,000	1,30,000
Profit and Loss Account	74,500	79,000
Accumulated Depreciation	40,500	24,000
Current Liabilities	1,10,000	1,04,000
	3,35,000	3,37,000

Additional Information :

Depreciation provided during the year ending 31st March, 1990 amounted to Rs. 13,500.

STATEMENT OF CHANGES IN WORKING CAPITAL

	April 1, 1989	March 31, 1990	Working Capital Increase	Working Capital Decrease
			Rs.	Rs.
Current Assets:				
Short-term Investments	10,000	—	—	10,000
Other Current Assets	1,50,000	1,52,000	2,000	—
(*a*)	1,60,000	1,52,000		
Current Liabilities				
(*b*)	1,10,000	1,04,000	6,000	—
			8,000	10,000
(*a*) – (*b*)	50,000	48,000		

Net Decrease in Working Capital = Rs. 8,000 – Rs. 10,000
= Rs. 2,000

FUNDS FLOW STATEMENT
for the year ending 31st March, 1990

Sources	Rs.	*Uses*	Rs.
Issue of Shares	20,000	Purchase of Other Fixed Assets	60,000
Funds from Trading Operations	38,000		

(*Contd.*)

	Rs.		Rs.
Net Decrease in Working Capital	2,000		
	60,000		60,000

Calculation of Funds from Trading Operations,:

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Goodwill written off	10,000	By Balance b/fd	74,500
To Miscellaneous Expenses written off	10,000	By Funds from Trading Operations (*Balancing figure*)	38,000
To Depreciation	13,500		
To Balance c/d	79,000		
	1,12,500		1,12,500

Illustration 21. From the figures given below, prepare a statement showing Sources and Applications of Funds during the year 1989-90 :

	March 31, 1989	March 31, 1990
Assets	Rs.	Rs.
Fixed Assets (Net)	5,10,000	6,20,000
Investments	30,000	80,000
Current Assets	2,40,000	3,75,000
Discount on Issue of Debentures	10,000	5,000
	7,90,000	10,80,000
Liabilities		
Share Capital	3,00,000	3,50,000
12% Preference Share Capital	2,00,000	1,00,000
14% Debentures	1,00,000	2,00,000
Reserves	1,10,000	2,70,000
Provision for Doubtful Debts	10,000	15,000
Current Liabilities	70,000	1,45,000
	7,90,000	10,80,000

The provision for depreciation stood at Rs. 1,50,000 on 31st March, 1989 and at Rs. 1,90,000 on 31st March, 1990. During the year—

(*a*) a machine costing Rs. 70,000 (book value Rs. 40,000) was disposed of for Rs. 25,000 ;

(*b*) preference share redemption was carried out at a premium of 5% on 1st April, 1989 ;

(*c*) dividend at 15% was paid on equity shares for the year 1989-90.

(*D.U.*)

Solution :

STATEMENT OF SOURCES AND APPLICATION OF FUNDS
For the Year ended 31st March, 1990

Sources	Rs.	Rs.	*Application*		Rs.
Profit earned during 1989-90 (2)	2,34,000		Purchase of Fixed Assets (4)		2,20,000
Add Non-cash charges:			Purchase of Investments		50,000
Depreciation (3)	70,000		Redemption of Preference Shares		1,05,000
Discount on Debentures	5,000	3,09,000	Payment of Dividend :		
			Preference	12,000	
Issue of Shares		50,000	Equity	45,000	57,000
Issue of Debentures		1,00,000	Increase in Working Capital (1)		52,000
Sale of Machine		25,000			
		4,84,000			4,84,000

Working Notes:

(1) STATEMENT OF CHANGES IN WORKING CAPITAL

	March 31, 1989	March 31, 1990	Working Capital Increase	Working Capital Decrease
	Rs.	Rs.	Rs.	Rs.
Current Assets *Less* Provision for Doubtful Debts	2,30,000	3,60,000	1,30,000	
Current Liabilities	70,000	1,45,000		75,000
Increase in Working Capital				55,000
			1,30,000	1,30,000

(2) Profit earned during the year

RESERVES ACCOUNT

		Rs.			Rs.
	To Machinery A/c (Loss on Sale)	15,000	1989 April 1	By Balance b/d	1,10,000
	To Premium on Redemption of Preference Shares	5,000		By Profit earned (*Balancing figure*)	2,34,000
	To Preference Dividend	12,000			
	To Equity Dividend	45,000			
1990 Mar. 31	To Balance c/d	2,67,000			
		3,44,000			3,44,000

Dr. FIXED ASSETS ACCOUNT Cr.

1989		Rs.			Rs.
Apr. 1	To Balance b/d (5,10,000 + 1,50,000)	6,60,000		By Machine Disposal A/c	70,000
	To Bank (Purchases)	2,20,000	1990 Mar. 31	Balance c/d (6,20,000 + 1,90,000)	8,10,000
		8,80,000			8,80,000
	To Balance b/d	8,10,000			

Dr. PROVISION FOR DEPRECIATION Cr.

		Rs.	1989		Rs.
	To Machine Disposal A/c (Dep. on Machine sold)	30,000	Apr. 1	By Balance b/d	1,50,000
				By Profit and Loss Account	70,000
1990 Mar. 31	To Balance c/d	1,90,000			
		2,20,000			2,20,000

Dr. MACHINE DISPOSAL ACCOUNT Cr.

		Rs.			Rs.
	To Fixed Assets A/c	70,000		By Provision for Depreciation	30,000
				By Bank	25,000
				By Profit and Loss Account (Loss transferred)	15,000
		70,000			70,000

CASH FLOW STATEMENT

Cash flow statement is in many respects similar to funds flow statement. Actually, cash flow analysis extends net working capital analysis by examining effect of *changes in cash* in the accounts that comprise net working capital. In funds flow statement, we notice an item either as net increase in working capital or net decrease in working capital. This net increase or decrease in working capital is the result of increase and decrease in different current assets and current liabilities. In cash flow statement, instead of showing net increase or net decrease in working capital, we show increase or decrease in *each one* of current liabilities and current assets. The following example will explain the point :

Illustration 22. The following are the summarised Balance Sheets of Karuna Ltd. as at 31st March, 1989 and 31st March, 1990 respectively :

March 31, 1989	*Liabilities*	March 31, 1990	March 31, 1989	*Assets*	March 31, 1990
Rs.		Rs.	Rs.		Rs.
2,00,000	Equity Share Capital	4,00,000	3,60,000	Plant and Machinery	3,30,000
1,20,000	Profit and Loss A/c	2,00,000	65,000	Furniture and Fittings	50,000
2,00,000	12% Debentures	1,00,000	1,65,000	Stock	2,20,000
70,000	Bills Payable	40,000	1,25,000	Sundry Debtors	1,70,000
1,00,000	Trade Creditors	80,000	15,000	Cash in Hand	10,000
40,000	Outstanding Expenses	70,000	40,000	Cash at Bank	1,70,000
70,000	Provision for Taxation	1,10,000	30,000	Bills Receivable	50,000
8,00,000		10,00,000	8,00,000		10,00,000

You are required to prepare :

(*i*) Schedule of Changes in Working Capital ;

(*ii*) Funds Flow Statement ;

(*iii*) Cash Flow Statement.

Solution :

SCHEDULE OF CHANGES IN WORKING CAPITAL

	March 31 1989	March 31 1990	Working Capital Increases	Working Capital Decreases
	Rs.	Rs.	Rs.	Rs.
Current Assets:				
Stock	1,65,000	2,20,000	55,000	—
Sundry Debtors	1,25,000	1,70,000	45,000	—
Cash in Hand	15,000	10,000	—	5,000
Cash at Bank	40,000	1,70,000	1,30,000	—
Bills Receivable	30,000	50,000	20,000	—
(*a*)	3,75,000	6,20,000		
Current Liabilities:				
Bills payable	70,000	40,000	30,000	—
Trade Creditors	1,00,000	80,000	20,000	—
Outstanding Expenses	40,000	70,000	—	30,000
Provision for Taxation	70,000	1,10,000	—	40,000
(*b*)	2,80,000	3,00,000	3,00,000	75,000
(*a*) – (*b*)	95,000	3,20,000		

Net Increase in Working Capital = Rs. 3,00,000 – Rs. 75,000

= Rs. 2,25,000

FUNDS FLOW STATEMENT
for the year ending 31st March, 1990

Sources	Rs.	Uses	Rs.
Issue of Equity Shares	2,00,000	Redemption of 12% Debentures	1,00,000
Funds from Trading Operations	1,25,000	Net Increase in Working Capital	2,25,000
	3,25,000		3,25,000

Working Note:

(*i*) *Funds from Trading Operations*

		Rs.
Net Profit as per Balance Sheet (Rs. 2,00,000 – Rs. 1,20,000)		80,000
Add Depreciation on :		
Plant and Machinery	30,000	
Furniture and Fittings	15,000	45,000
		1,25,000

CASH FLOW STATEMENT
for the year ending 31st March, 1990

Sources		Rs.	Uses		Rs.
Opening Balances :			Redemption of 12% Debentures		1,00,000
Cash in Band	15,000		Decrease in :		
Cash at Bank	40,000	55,000	Bills Payable	30,000	
Issue of Equity Shares		2,00,000	Trade Creditors	20,000	50,000
Funds from Trading Operations		1,25,000	Increase in :		
Increase in :			Stock	55,000	
Outstanding Exp.	30,000		Sundry Debtors	45,000	
Provision for Tax	40,000	70,000	Bills Receivable	20,000	1,20,000
			Closing Balances :		
			Cash in Hand	10,000	
			Cash at Bank	1,70,000	1,80,000
		4,50,000			4,50,000

Cash Flow Statement Vs. Funds Flow Statement

1. Cash flow statement is concerned with cash position only whereas funds flow statement is concerned with changes in working capital of which cash is only one of the constituents.

2. Cash flow statement is useful to the management as a tool of financial analysis in short period as compared to funds flow statement.

3. If cash flow statement is given, we can prepare therefrom funds flow statement. On the other hand, if funds flow statement is given, cash flow statement cannot be prepared without knowing the increases and decreases in the current assets and current liabilities.

TEST QUESTIONS

1. What do you understand by FUNDS FLOW STATEMENT ? What are its other common names ?

2. Define funds flow statement and bring out its importance in the accounting process.

3. In a statement of Sources and Applications of Funds, what is the meaning of the term "funds" ?

4. What is a Funds Flow Statement ? State its objectives.

5. Define the terms 'fund' and 'flow' in respect of a Funds Flow Statement. How is a Fund Flow Statement prepared ? *(All India SSCE, 1988)*

6. What do you mean by 'Funds' and 'Flow' in relation to a Funds Flow Statement ? How is this statement prepared ? *(Delhi SSCE, 1982)*

7. What is a Funds Flow Statement ? What is its importance and usefulness in the accounting system ? How is this statement prepared ? *(Delhi SSCE, 1983)*

8. Why do companies prepare a funds flow statement in addition to balance-sheet and income statement ? How does it differ from a schedule of changes in working capital ? *(Delhi SSCE, 1985)*

9. What is a Funds Flow Statement ? How does a Funds Flow Statement differ from profit and loss account ? What is its importance in accounting system ? *(Delhi SSCE, 1984)*

10. Distinguish between 'Funds Flow Statement' and 'Income Statement'. *(All India SSCE, 1983)*

11. What is a 'Funds Flow Statement' ? What basic data are necessary to prepare such a statement ? *(All India SSCE, 1984)*

12. What are the various sources and uses of funds ? *(Delhi SSCE, 1981)*

13. What is a Funds Flow Statement ? What purpose does it serve ? In what respects is it different from the Balance Sheet ? *(Delhi SSCE, 1984)*

14. Mention important uses of Fund Flow Statement.

(Delhi SSCE, 1989)

15. Explain clearly the meaning of 'Funds Flow Statement'. State the purposes for which it is prepared.

In what way does the 'Funds Flow Statement' differ from the 'Schedule of Changes in Working Capital' ? *(All India SSCE, 1989)*

16. (*a*) What is a Fund Flow Statement ?

(*b*) State (giving examples) four sources from where funds are usually obtained by a business.

(*c*) Is depreciation a source of funds ?

Give reasons in support of your answer. *(All India SSCE, 1988)*

17. What is a Cash Flow Statement ? How is it prepared ?

18. How does Cash Flow Statement differ from Funds Flow Statement ?

19. What is meant by working capital ? How is it calculated ?

20. What are the main sources of working capital ? What are the ways in which it is applied ?

21. How are the changes in non-current items of balance sheet represented in the funds flow statement ?

22. A business suffered a net loss in a given year. Can the Funds Flow Statement of this business for that year show an amount for "funds from operation"/

23. Write short notes on :

(*a*) Depreciation and its treatment.

(*b*) Gain or loss on sale of fixed assets and its treatment.

(*c*) Hidden transactions.

(*d*) Compound transactions.

24. What are the necessary steps to prepare a funds flow statement ? Explain each of them briefly.

25. Give a summary of common transactions which are encountered in preparing the funds flow statement and their possible treatment as well.

PRACTICAL EXERCISES

1. Calculate funds from operation from the following Profit and Loss Account :

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
Expenses paid and Outstanding	6,000	Gross Profit	9,000
Depreciation	1,400	Gain on sale of Land	1,200
Loss on Sale of Machine	80		
Discount allowed	4		
Goodwill written off	400		
Net Profit	2,316		
	10,200		10,200

(Adapted from Delhi SSCE, 1980)

(Rs. 2,996)

2. Calculate funds from operation from the following details :

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Salaries	30,000	By Gross Profit	80,000
To Sundry expenses	10,000	By Profit on sale of Machinery	10,000
To Loss on sale of Furniture	5,500	By Discount received from Suppliers	5,000
To Discount allowed	1,500		
To Goodwill written off	8,000		
To Preliminary Expenses written off	2,000		
To Depreciation	13,000		
To Net Profit	25,000		
	95,000		95,000

(Adapted from All India SSCE, 1982)

(Rs. 43,500)

3. From the following information, prepare a Statement of Sources and Applications of Funds for the year ended 31st March, 1990 :

(*i*) Increase in Working Capital Rs. 9,000
(*ii*) Net Profit Rs. 10,750
(*iii*) Depreciation provided on fixed assets Rs. 1,750.
(*iv*) Dividend paid Rs. 3,500.
(*v*) Goodwill Rs. 5,000 written out of profits.
(*vi*) Rs. 5,000 Share Capital was issued for cash.
(*vii*) Machinery was purchased for Rs. 10,000.

4. From the following particulars, determine 'Funds from Operation' :

	Rs.
Net Loss	70,000
Depreciation on Machinery	40,000

Amortisation of Goodwill	20,000
Prepaid Expenses	12,000
Preliminary Expenses written off	10,000
Discount allowed to Customers	6,000
Discount on Issue of Debentures written off	15,000

(*Rs. 15,000*)

5. Your are required to calculate 'Funds from Operations' from the following Profit and Loss Account of ESKAY Ltd.:

Dr. PROFIT AND LOSS ACCOUNT Cr.

	Rs.		Rs.
To Expenses paid and Outstanding	2,30,000	By Gross Profit b/d	5,50,000
To Depreciation on Fixed Assets	70,000	By Profit on sale of Building	1,50,000
To Preliminary Expenses written off	12,000		
To Provision for Income Tax	80,000		
To General Reserve	20,000		
To Proposed Dividend :			
Preference	14,000		
Equity	30,000		
To Net Profit c/d	2,44,000		
	7,00,000		7,00,000

(*Rs. 2,40,000*)

6. Calculate 'Funds from Operations' from the following particulars :

	March 31, 1989	March 31, 1990
Profit and Loss Account	1,30,000	2,00,000
General Reserve	50,000	70,000
Preliminary Expenses	40,000	30,000
Prepaid Expenses	12,000	10,000
Provision for Depreciation	80,000	1,00,000

(*Rs. 1,20,000*)

7. Calculate 'Funds from trading Operations' from the following details of Sigma Ltd. The net profit of the company for the year ending 31st March, 1990 has been arrived at after taking into account.

(*i*) Net Profit as per Profit and Loss Account Rs. 2,40,000.

(*ii*) Rs. 75,000 has been transferred to General Reserve.

(*iii*) Old Machinery having a book value of Rs. 30,000 was sold for Rs. 8,000.

(*iv*) Goodwill appears in the books at Rs. 1,20,000 out of which 10 per cent has been written off during the year.

(*v*) Depreciation @ 20% has been charged during the year on fixed assets whose cost is Rs. 7,00,000.

(*vi*) Preference Shares have been redeemed at a premium of 5%. The premium paid amounts to Rs. 5,000.

(*Rs. 4,94,000*)

8. Calculate Funds from Operations from the following Profit and Loss Account :

PROFIT AND LOSS ACCOUNT

Dr.	Rs.		Cr. Rs.
To Expenses paid and outstanding	2,30,000	By Gross Profit b/fd	5,81,000
To Depreciation	70,000	By Discount received from Suppliers	2,000
To Underwriting Commission on Issue of Shares written off	15,000		
To Goodwill written off	10,000		
To Discount allowed to Customers	5,000		
To Provision for bad debts	3,000		
To Provision for Income Tax	1,20,000		
To Net Profit c/d	1,30,000		
	5,83,000		5,83,000

(*Rs. 2,25,000*)

[*Note:* (*i*) Discount allowed to customers and provision for bad debts will not be added back to Net Profit as they are business expenses.

(*ii*) Provision for Income Tax has not been added back to Net Profits as the amount of 'net profit after tax' has been taken into account].

9. A Ltd. reported net profit Rs. 2,00,000 for the year ending 31st March, 1990. The amount of net profit has been arrived at after deducting Rs. 40,000 for depreciation expense and Rs. 10,000 for amortization of patents. A loss of Rs. 16,000 on the sale of plant and machinery was also deducted.

Calculate the amount of net working capital from business operations.

(*Rs. 2,66,000*)

10. The following income statement is for Hopeful Ltd. for the year ending 31st March, 1990 :

	Rs.	Rs.
Net Sales		10,00,000
Less Cost of goods sold	6,20,000	
Operating expenses	3,50,000	
Depreciation	2,30,000	12,00,000
Net Loss		2,00,000

Compute the amount of net working capital from operations.

(Rs. 30,000)

11. State, giving reasons, which of the following would result in (i) inflow (ii) outflow (iii) neither inflow nor outflow, of funds: (attempt any five).

(*a*) Purchase of a typewriter for office use

(*b*) Issue of shares in exchange of a machine for use in company's factory.

(*c*) Conversion of Debentures into shares

(*d*) Provision for Depreciation

(*e*) A short-term loan (six months) from a bank.

(All India SSCE, 1986, Modified)

[*Outflow: (a); Neither inflow nor outflow of funds: (b), (c), (d) and (e)*]

12. Prepare 'Schedule of Changes in Working Capital' of Bee Ltd. from the details given below :

	April 1, 1989	March 31, 1990
Stock	1,40,000	90,000
Trade Debtors	1,25,000	1,62,000
Bills Receivable	20,000	22,000
Bills Payable	17,000	9,000
Outstanding Expenses	12,000	18,000
Prepaid Expenses	11,000	5,000
Preliminary Expenses	30,000	24,000
Trade Creditors	65,000	85,000
Cash in Hand	10,000	8,000
Cash at Bank	70,000	1,00,000

(Net Decrease in Working Capital Rs. 7,000)

13. The following extracts have been taken from the summarised Balance Sheets of Smriti Ltd. You are required to prepare Schedule of Changes in Working Capital.

	March 31, 1990 Rs.	March 31, 1989 Rs.
Accounts Receivable	2,30,000	2,70,000
Interest Accrued on Investments	14,000	18,000
Cash in hand and at bank	1,52,000	1,22,000
Accounts Payable	90,000	1,15,000

	Rs.	Rs.
Bonds Payable	3,00,000	3,00,000
Stock	1,80,000	1,25,000
Prepaid Expenses	12,000	17,000
Underwriting Commission	25,000	35,000

(Net Increase in Working Capital Rs. 61,000)

14. From the following Balance Sheets X Co. Ltd. you are required to prepare Schedule of Changes in Working Capital and Statement of Flow of Funds :

	March 31, 1989	March 31, 1990
Assets :	Rs.	Rs.
Land and Buildings	50,000	50,000
Plant	24,000	34,000
Stock	9,000	7,000
Debtors	16,500	19,500
Cash at Bank	4,000	9,000
Capital and Liabilities :		
Share Capital	80,000	85,000
Profit and Loss Account	14,500	24,500
Creditors	9,000	5,000
Mortgage	—	5,000

(Funds from operations Rs. 10,000 ; Net increase in Working Capital Rs. 10,000 ; Total of Funds Flow Statement Rs. 20,000)

15. From the following Balance Sheet of 'A Ltd.' you are required to prepare a Schedule of Changes in Working Capital and Statement of Flow of Funds:—

	~~March 31,~~ 1989	March 31 1990
Liabilities	Rs.	Rs.
Share Capital	80,000	85,000
Profit and Loss Appropriation Account	14,500	24,500
Creditors	9,000	5,000
Mortgage	—	5,000
	1,03,500	1,19,500
Assets		
Land and Buildings	50,000	50,000
Plant and Machinery	24,000	34,000
Stock	9,000	7,000
Debtors	16,500	19,500
Cash at Bank	4,000	9,000
	1,03,500	1,19,500

(Adapted from All India SSCE, 1980)

(Funds from Operations Rs. 10,000 ; Net Increase in Working Capital Rs. 10,000 ; Total of Funds Flow Statement Rs.20,000)

16. The following are the Balance Sheets of M/s New Delhi Corporation Ltd. as at 31st March, 1989 and 1990 :

Liabilities	March 31, 1989	March 31, 1990	*Assets*	March 31, 1989	March 31, 1990
	Rs.	Rs.		Rs.	Rs.
Equity Share Capital Account	80,000	1,20,000	Goodwill	20,000	16,000
11% Redeemable Preference Share Capital A/c	40,000	20,000	Land and Buildings	40,000	20,000
General Reserve	8,000	12,000	Plant and Machinery	36,000	76,400
Profit and Loss A/c	7,200	10,800	Long-term Investments	4,000	14,000
Bills Payable	14,000	21,200	Stock	30,000	43,200
Outstanding Exp.	3,200	2,400	Sundry Debtors	34,000	31,200
Provision for Taxation	11,200	12,800	Cash at Bank	6,800	11,200
Proposed Durdind	11,200	15,600	Preliminary Exp.	4,000	2,800
	1,74,800	2,14,800		1,74,800	2,14,800

You are required to prepare

(*i*) Schedule of Changes in Working Capital ;

(*ii*) Funds Flow Statement.

(*Adapted from Delhi SSCE, 1986*)

(*Funds from Operations Rs. 28,400 ; Net Increase in Working Capital Rs. 6,800 ; Total of Funds Flow Statement Rs. 88,400*)

17. The following are the Balance Sheets of Ram Parsad & Co., on 31st March, 1989 and 1990 :

	1988-89	1990
Capital and Reserves	Rs.	Rs.
10% Preference Share Capital	1,00,000	1,10,000
Equity Share Capital	2,00,000	2,50,000
Share Premium Account	20,000	26,000
Profit and Loss Account	1,04,000	1,34,000
Liabilities (Non-Current)		
12% Debentures	70,000	64,000
Current Liabilities		
Creditors	38,000	46,000
Bills Payable	5,000	4,000
Provision for Taxation	10,000	12,000
Dividends Payable	7,000	8,000
Total Liabilities and Capital	5,74,000	6,54,000

(*Contd.*)

(*Contd.*)

	Rs.	Rs.
Non-Current Assets		
Machinery (net)	2,00,000	2,30,000
Buildings (Net)	1,50,000	1,76,000
Land	18,000	18,000
Current Assets		
Cash	42,000	32,000
Debtors	38,000	38,000
Bills Receivable	42,000	62,000
Stock on hand	84,000	98,000
Total Assets	5,74,000	6,54,000

You are required to prepare a statement of Sources and Application of Funds.

(*Adapted from All India SSCE, 1981*)

(*Funds from Operations Rs. 30,000 ; Net Increase in Working Capital Rs. 14,000 ; Total of Funds Flow Statement Rs. 76,000*)

18. From the following particulars; prepare for the year 1989-90 :

(*i*) Schedule of changes in Working Capital ; and

(*ii*) Funds Flow Statement.

		March 31, 1989 Rs.		March 31, 1990 Rs.
Assets				
Furniture, at cost	40,000		50,000	
Less Provision for depreciation	18,000	22,000	23,000	27,000
Stock		70,000		78,000
Debtors		17,000		16,000
Cash at Bank		12,000		34,000
Prepaid Expenses		2,500		1,600
		1,23,500		1,56,600
Liabilities				
Equity Share Capital		50,000		1,00,000
Preference Share Capital		25,000		—
Profit and Loss Account		20,000		37,000
Creditors		28,500		19,600
		1,23,500		1,56,600

(*Adapted from Delhi SSCE, 1987*)

(*Funds from Operations Rs. 22,000 ; Net Increase in Working Capital Rs. 37,000 ; Total of Funds Flow Statement Rs. 72,000*)

19. The Balance Sheets of Manohar Ltd. as at 31st March, 1989 and 1990 are as follows :

Liabilities	March 31, 1989	March 31, 1990	Assets	March 31, 1989	March 31, 1990
	Rs.	Rs.		Rs.	Rs.
Equity Share Capital	3,00,000	4,00,000	Fixed Assets *Less* Provision for Dep.	3,20,000	4,15,000
Profit and Loss A/c	85,000	1,10,000	Investments	80,000	1,10,000
Bank Loan	1,00,000	75,000	Stock	2,00,000	2,25,000
Creditors	3,10,000	2,90,000	Debtors	2,10,000	1,90,000
Bank Overdraft	—	5,000	Cash at Bank	30,000	—
Proposed Dividend	45,000	60,000			
	8,40,000	9,40,000		8,40,000	9,40,000

You are required to prepare the following :
(*i*) Schedule of Changes in Working Capital ;
(*ii*) Funds Flow Statement.

(Adapted from Delhi SSCE, 1988)
(Funds from Operation Rs. 1,40,000 ; Net Decrease in Working Capital Rs. 10,000 ; Total of Funds Flow Statement Rs. 2,50,000).

20. Prepare (*i*) Schedule of Changes in Working Capital and (*ii*) Statement of Sources and Applications of Funds from the following Balance Sheets as at :

Liabilities	March 31 1990	March 31 1989
	Rs.	Rs.
Equity Share Capital	10,00,000	10,00,000
Profit and Loss Account	15,40,000	5,20,000
Long-term Loan	8,00,000	6,00,000
Sundry Creditors	3,60,000	3,60,000
Outstanding Wages	80,000	1,40,000
Income Tax Payable	3,40,000	3,80,000
Short-term Loan	2,40,000	2,40,000
	43,60,000	32,40,000
Assets		
Plant and Machinery	9,60,000	10,60,000
Furniture	90,000	1,00,000
Long-term Investments	11,10,000	6,00,000
Stock	9,20,000	5,40,000
Debtors	6,60,000	3,40,000
Cash at Bank	5,40,000	5,60,000
Prepaid Insurance	80,000	40,000
	43,60,000	32,40,000

(Adapted from Delhi SSCE, 1989)
(Funds from Operations Rs. 11,30,000 ; Net Increase in Working Capital Rs. 8,20,000 ; Total of Funds Flow Statement Rs. 13,30,000).

21. The Balance Sheets of B Ltd. as at 31st March 1989 and 31st March 1990 were as follows :

Assets	31st March, 1989 Rs.	31st March, 1990 Rs.
Land and Buildings	80,000	1,20,000
Plant and Machinery	5,00,000	8,00,000
Stock	1,00,000	75,000
Sundry Debtors	1,50,000	1,60,000
Cash	20,000	20,000
	8,50,000	11,75,000
Liabilities		
Share Capital	5,00,000	7,00,000
Profit and Loss Account	1,00,000	1,60,000
General Reserve	50,000	70,000
Sundry Creditors	1,53,000	1,90,000
Bills Payable	40,000	50,000
Outstanding Expenses	7,000	5,000
	8,50,000	11,75,000

Additional information:

(*i*) Rs. 50,000 depreciation has been provided on Plant and Machinery during the year ending 31st March, 1990.

(*ii*) A piece of Machinery was sold for Rs. 8,000 during 1989-90. It had cost Rs. 12,000, depreciation of Rs. 7,000 had been accumulated on it.

Prepare a Schedule of Changes in Working Capital and a Statement of Funds Flow.

(*All India SSCE Comptt. 1980*)

(*Funds from Operations Rs. 1,27,000 ; Decrease in Working Capital Rs. 60,000 ; Total of Funds Flow Statement Rs. 3,95,000*)

22. Prepare a Funds Flow Statement from the following information :

Assets	April 1, 1989 Rs.	April 1, 1990 Rs.
Fixed Assets	4,00,000	5,00,000
Investments	30,000	80,000
Current Assets	2,40,000	4,00,000
	6,70,000	9,80,000
Liabilities		
Share Capital	2,00,000	3,00,000
General Reserve	1,50,000	2,00,000
Profit and Loss Account	60,000	70,000
13% Debentures	1,80,000	3,00,000
Current Liabilities	80,000	1,10,000
	6,70,000	9;80,000

During the year a dividend @ 15% was paid for 1989-90 on share capital

(Dividend Rs. 30,000; Funds from Operation Rs. 90,000 ; Net Increase in Working Capital Rs. 1,30,000; Total of Funds Flow Satement Rs. 3,10,000)

23. From the following Balance Sheets of M/s S.M. Industries, prepare a Funds Flow Statement.

Liabilities	March 31, 1989 Rs.	March 31, 1990 Rs.	*Assets*	March 31, 1989 Rs.	March 31, 1990 Rs.
Share Capital	60,000	65,000	Goodwill	30,000	25,000
Profit and Loss A/c	34,000	26,000	Plant and Machinery	60,000	50,000
Current Liabilities	12,000	3,000	Current Assets	16,000	19,000
	1,06,000	94,000		1,06,000	94,000

Additional information :

(*i*) Depreciation of Rs. 20,000 on Plant and Machinery was charged to Profit and Loss Account.

(*ii*) Dividends Rs. 12,000 were paid during the year.

(Adapted from Delhi SSCE, 1985)

(Funds from Operations Rs. 29,000; Net Increase in Working Capital Rs. 12,000 ; Totals of Funds Flow Statement Rs. 34,000)

24. From the following Balance Sheets of Royal Industries, prepare Funds Flow Statement for the year ending 31st March, 1990 :

Liabilities	March 31, 1989 Rs.	March 31, 1990 Rs.	*Assets*	March 31, 1989 Rs.	March 31, 1990 Rs.
Equity Share Capital	4,00,000	3,00,000	Goodwill	90,000	1,15,000
14% Non-convertible Debentures	1,00,000	1,50,000	Land & Building	1,70,000	2,00,000
General Reserve	70,000	40,000	Plant	2,00,000	80,000
Profit and Loss A/c	48,000	30,000	Current Assets	3,57,000	2,82,000
Proposed Dividend	50,000	42,000			
Current Liabilities	1,49,000	1,15,000			
	8,17,000	6,77,000		8,17,000	6,77,000

Additional Information :

(*i*) Depreciation has been charged on Plant Rs. 20,000.

(*ii*) There has been Profit on sale of Land Rs. 10,000.

(Delhi SSCE, 1983, Modified)

(Funds from Operation Rs. 1,33,000 ; Increase in Working Capital Rs. 41,000 ; Total of Funds Flow Statement Rs. 2,73,000)

25. From the following Balance Sheets and Income Statement, prepare a Funds Flow Statement for the year 1978 :

Five Stars Co., Ltd.

COMPARATIVE BALANCE SHEETS

	March 31, 1989 Rs.	March 31, 1990 Rs.
Assets		
Current Assets :		
Cash	30,000	50,000
Accounts Receivable	3,30,000	3,00,000
Inventory	3,00,000	2,80,000
Prepaid Expenses	10,000	20,000
Investments:		
Shares of ABCD	1,00,000	1,00,000
Properties :		
Equipment	1,80,000	1,80,000
Furniture	1,00,000	1,00,000
	10,50,000	10,30,000
Liabilities		
Current Liabilities :		
Sundry Creditors	2,50,000	3,00,000
Bills Payable	2,50,000	1,50,000
Accumulated Depreciation	50,000	80,000
Shareholders' Equity :		
Share Capital	3,50,000	3,50,000
Retained Earnings	1,50,000	1,50,000
	10,50,000	10,30,000

INCOME STATEMENT for 1989-90

		Rs.
Sales		19,00,000
Less Cost of Goods Sold		15,00,000
		4,00,000
Less Operating Expenses :	Rs.	
Salaries	3,00,000	
Rent	60,000	
Miscellaneous	10,000	
Depreciation	30,000	4,00,000
		Nil

(Total of Funds Flow Statement : Rs. 30,000)

26. Prepare a Statement of Sources and Uses of Funds from the following Balance Sheet and Income Statement of Everbrite Steels Ltd. :

BALANCE SHEET OF EVERBRITE STEELS LTD.
as at 31st March, 1990

Figures for the previous year	*Liabilities*	Figures for the current year	Figures for the previous year	*Assets*	Figures for the current year
Rs.		Rs.	Rs.		Rs.
15,000	Accounts Payable	25,000	5,000	Cash	2,000
13,000	Cash Credit	10,000	10,000	Accounts Receivable	8,000
2,000	Outstanding Expenses	3,000	5,000	Advances (Short-term)	—
30,000	Long-term Loan	20,000	20,000	Inventories	25,000
30,000	Share Capital	30,000	60,000	Fixed Assets (Net)	65,000
10,000	Reserves and Surplus	12,000			
1,00,000		1,00,000	1,00,000		1,00,000

INCOME STATEMENT OF EVERBRITE STEELS LTD.
for the year ending 1989-90

	Rs.
Sales	2,00,000
Less Cost of Goods Sold	1,70,000
	30,000
Less other Expenses (Including depreciation of Rs. 10,000)	20,000
Income before tax	10,000
Tax Provision	5,000
Dividend Paid	3,000
Retained in business	2,000
	10,000

(*Funds from Operations Rs. 15,000 ; Net Decrease in Working Capital Rs. 13,000 ; Total of Funds Flow Statement Rs. 28,000*)

27. Prepare Funds Flow Statement from the following data :

	March 31, 1989	March 31, 1990
Fixed Assets: Cost	8,00,000	9,50,000
Less Depreciation Reserve	2,30,000	2,90,000
	5,70,000	6,60,000
Trade Investments	1,00,000	80,000
Current Assets	2,80,000	3,30,000

(*Contd.*)

(Contd.)

	Rs.	Rs.
Preliminary Expenses	20,000	10,000
	9,70,000	10,80,000
Share Capital	3,00,000	4,00,000
General Reserve	1,70,000	2,00,000
Profit and Loss Account	60,000	85,000
12% Debentures	2,00,000	1,40,000
Liabilities for Goods and Services	1,20,000	1,30,000
Provision for Income Tax	90,000	85,000
Proposed Dividend	30,000	40,000
	9,70,000	10,80,000

During the year, the company

(*a*) sold a machine for Rs. 25,000 ; the cost of the machine was Rs. 50,000 and the total depreciation written off to date as Rs. 35,000.

(*b*) provided Rs. 95,000 as depreciation.

(*c*) redeemed 30% of the debentures at Rs. 105.

(Profit on sale of machine Rs. 10,000 ; Amount of 12% Debentures redeemed @ Rs. 105, Rs. 63,000 ; Funds from Operations Rs. 1,93,000 ; Net Increase in Working Capital Rs. 45,000 ; Total of Funds Flow Statement Rs. 3,38,000)

28. Below is given the condensed Balance Sheet of M/s Tarbo Larcen & Co. Ltd. for the year ending on 31st March, 1989 and 31st March, 1990.

CONDENSED BALANCE SHEET
of M/s Tarbo Larcen & Co., Ltd.

	March 31, 1989	March 31, 1990
Assets	Rs.	Rs.
Working Capital	200	320
Fixed Assets	435	470
Goodwill	10	8
Total Assets	645	798
Equities		
Debentures	175	200
Capital Stock	300	400
Retained Earnings	170	198
	645	798

INCOME STATEMENT
of M/s Tarbo Larcen & Co., Ltd.

			Lakhs Rs.
Sales			1,200
Less	Cost of Goods and Expenses :		
	Cost of goods sold	720	
	Selling and Administrative Expenses	70	
	Depreciation	30	
	Amortization of Goodwill	2	
	Interest and Miscellaneous Expenses	8	830
Operating Profit			370
Less	Income Tax		125
Net Income			245
Less	Dividends		217
Retained earnings			28

Prepare the Funds Flow Statement.

	Rs. (in lakhs)
(Funds from Operations	*277*
Net Increase in Working Capital	*120*
Total of Funds Flow Statement	*402)*

29. From the following comparative Balance Sheets of Fibre Textiles Ltd., you are required to prepare (*i*) Funds Flow Statement ; (*ii*) Cash Flow Statement:

Liabilities	March 31, 1989 Rs.	March 31, 1990 Rs.	*Assets*	March 31, 1989 Rs.	March 31, 1990 Rs.
Share Capital	2,40,000	2,55,000	Land and Buildings	1,50,000	1,50,000
Profit and Loss A/c	43,500	73,500	Plant	75,000	1,05,000
Mortgage Debentures	—	15,000	Stock	24,000	18,000
Sundry Creditors	27,000	15,000	Sundry Debtors	48,000	57,000
			Cash	13,500	28,500
	3,10,500	3,58,500		3,10,500	3,58,500

(Adapted from Delhi SSCE, 1981)

(Funds from Operation Rs. 30,000 ; Net Increase in Working Capital Rs. 30,000 ; Total of Funds Flow Statement Rs. 60,000 ; Total of Cash Flow Statement Rs. 79,500)

30. From the following Balance Sheets of Ramji Ltd. as at 31st March, prepare (*i*) Funds Flow Statement, and (*ii*) Cash Flow Statement :

Liabilities	March 31, 1989 Rs.	March 31, 1990 Rs.	*Assets*	March 31, 1989 Rs.	March 31, 1990 Rs.
Share Capital	36,000	38,000	Land and Buildings	10,000	12,400
Profit and Loss A/c	5,800	7,000	Machinery	1,600	1,800
Bills Payable	2,800	2,200	Sundry Debtors	31,000	38,000
Sundry Creditors	10,000	13,000	Cash at Bank	12,000	8,000
	54,600	60,200		54,600	60,200

(Adapted from Delhi SSCE, 1982)
(Funds from Operation Rs. 1,200 ; Net Increase in Working Capital Rs. 600 ; Total of Funds Flow Statement Rs. 3,200 ; Total of Cash Flow Statement Rs. 18,200)

31. From the following Balance Sheets of M/s Bharat Co., Prepare
   (*i*) Funds Flow Statement,
   (*ii*) Cash Flow Statement, and
   (*iii*) Schedule of Changes in Working Capital for the year ending 31st March, 1990 :

Assets	March 31, 1990	March 31, 1989
	Rs.	Rs.
Goodwill	5,000	10,000
Plant and Machinery	27,000	15,000
Long-term Investments	10,000	15,000
Stock	1,20,000	87,000
Debtors	90,000	98,000
Cash at Bank	70,000	25,000
Preliminary Expenses	3,000	5,000
	3,25,000	2,55,000
Liabilities	Rs.	Rs.
Share Capital	1,50,000	1,25,000
Profit and Loss Account	75,000	60,000
Loans Payable (on 31st December, 1990)	20,000	—
Bills Payable	35,000	20,000
Sundry Creditors	45,000	50,000
	3,25,000	2,55,000

(Adapted from Delhi SSCE, 1984)
(Funds from Operation Rs. 22,000 ; Net Increase in Working Capital Rs. 40,000 ; Totals of Funds Flow Statement Rs. 52,000, Total of Cash Flow Statement Rs. 1,20,000)

UNIT 7

Comparison of Financial Statements

(5 Marks)

(*a*) Meaning and purpose.
(*b*) Changes in absolute figures for not more than three years to be commented upon (Intra-firm) only.

11

Comparison of Financial Statements

In the last Chapter, a reference was made to three widely used techniques of financial statement analysis. One of these techniques is comparison of financial statements.

The financial statements (*i.e.*, Balance Sheet and Profit and Loss Account) of any year contain individual bits of data or information relating to assets, liabilities, incomes, expenses and losses. The information contained in these statements is important for the particular year to which it relates. This information however becomes more meaningful when it is expressed in a comparative format. For example, if the profits of a firm for the financial year ending on 31st March, 1990 are Rs. 5,00,000, this information has one meaning if last year's profits were Rs. 1,00,000 and another if last year's profits were Rs. 1,00,00,000. This example shows how important it is that the financial data of the firm of any year should be compared with the data of the firm for other years. Not only that, this data should also be compared with data of other firms in the industry. Thus to evaluate the financial statements of a firm and to analyse its future prospects, the financial statements of the firm should be compared. The analysis of financial statements by comparison may be :

(1) *Historic-base comparison.* In historic-base comparison (also known as intra-firm comparison) the financial statements of a firm for any year are compared with its financial statements of earlier years. This historic analysis compares the current performance of the firm with historical data of the same firm. This comparison also helps in ascertaining the trends (as to whether sales are increasing, falling or are constant) that have developed over time. These trends help in forecasting future developments (as to whether sales will increase, fall or will remain constant) if underlying conditions remain unchanged.

The historic-base comparison may be illustrated with a beautiful example. If a train is running at a known rate of speed, it is reasonable to presume that it will continue to run at approximately the same rate of speed unless some obstacle interrupts its progress, or the motive power is increased or decreased. Likewise, it is reasonable to assume that a business will continue to move in the same direction as indicated by its comparative trends, unless some drastic change takes place in the business itself or in

general economic conditions prevailing in the country (and now quite often in the world). Thus if sales of a firm have been rising at the rate of 10% over last five years, it is safe to presume that the sales in the current year will also rise approximately by 10%.

(2) *Like-kind (base) comparison.* In this comparison (also known as inter-firm comparison) the financial statements of a firm are compared with the financial statements of similar other firms for the same period. These statements, if analysed and scrutinised by themselves, may not give any meaningful information as to whether the firm is performing more successfully or less successfully as compared to other firms in the same industry. Let us say, company A, manufacturing tooth paste, is earning a net profit of 25% on capital employed. The management is very much satisfied with the performance of the company if it is taken by itself. But what will be the management's reaction if it learns that other companies of comparable size are earning a net profit of 50% on capital employed. Obviously, not satisfied; and then it will attempt to seek and analyse the causes of its low operational efficiency. And that precisely is the purpose of this comparison.

(3) *Goal norm comparison.* In the modern competitive world, where survival of the fittest is the law of nature, every firm tries to outbid the others. To achieve this objective, a firm specifies a goal or target in terms of production, marketability and profitability. In goal norm comparison, actual performance is compared with predetermined goals or norms which play a key role in the decision-making process.

In the rest of this Chapter, we shall discuss intra-firm comparison in detail.

INTRA-FIRM COMPARISON

As already observed, in intra-firm comparison, the financial statements of a firm for any period are compared with the financial statements of the firm for earlier periods. The purpose of this comparison may be—

(1) to find out and study the changes in the current period figures;
(2) to ascertain reasons for these changes, and to take corrective measures in future;
(3) to establish trends and to forecast future figures of, say, production, sales, cash receipts and cash disbursements, capital requirement, etc.

COMPARATIVE ANALYSIS

In comparative analysis, the financial data of current year is compared with the financial data for one or more previous years. This comparison may be of the following two types:

1. *Absolute Comparison.* When the absolute amount of each item in the current financial statements is compared with the corresponding item in

the financial statements of previous years, it is called *absolute comparison*. This is the simplest form of comparative analysis as not many calculations are involved. The comparison only gives broad conclusions.

Illustration 1. The following are the Trading Accounts of Eveready Co. Ltd. for the two years ending on 31st March, 1989 and 1990 :

	1989	1990		1989	1990
	Rs.	Rs.		Rs.	Rs.
To Opening Stock	20,000	80,000	By Sales *less* Returns	3,00,000	6,00,000
To Purchases *less* Returns	1,00,000	3,50,000	By Closing Stock	80,000	60,000
To Wages	50,000	1,00,000			
To Manufacturing Expenses	75,000	80,000			
To Gross Profit	1,35,000	50,000			
	3,80,000	6,60,000		3,80,000	6,60,000

Draw your conclusions from the comparison of figures of 1989 and 1990.

Solution :

(1) The sales in 1990 have doubled up which is satisfactory from the point of view of growth of the Company.

(2) Despite increase in sales, the gross profit of the company has decreased. This is a danger signal for the company.

(3) The Purchases in 1990 have spurted. This should be a cause of concern. Either prices of raw material have suddenly gone up or there has been some abnormal loss. The cause should be thoroughly investigated.

(4) In spite of such heavy purchases in 1990, the closing stock has decreased. There should be a close scrutiny as to how this has happened. This scrutiny should be linked with investigation as to purchases.

(5) Whereas Wages have doubled during 1990, the Manufacturing Expenses have only marginally increased.

(6) Although 1990 shows a gross profit of Rs. 50,000, the over-all position does not appear to be satisfactory.

Illustration 2. From the following Profit and Loss Accounts of Software Ltd. (prepared in vertical form) for the years ending on 31st March, 1989 and 1990, draw suitable conclusions :

	Year ended 31st March, 1990	Year ended 31st March, 1989
	Rs.	Rs.
Sales	6,40,000	4,80,000
Less Cost of Goods Sold	3,56,000	2,48,000
Gross Profit	2,84,000	2,32,000

(Contd.)

	Rs.	Rs.
Less Administrative Expenses	1,28,000	88,000
Selling Expenses	72,000	84,000
Interest Charges	3,200	4,800
	2,03,200	1,76,800
Net Profit before Income Tax	80,800	55,200
Less Income Tax @ 50%	40,400	27,600
Net Profit after Income Tax	40,400	27,600

Solution :

(1) Both Sales and Gross Profit have increased and this is a favourable sign.

(2) Cost of Goods Sold and Administrative Expenses have more than proportionately increased.

(3) Selling Expenses and Interest Charges have come down. This is a favourable sign as sales have been increasing and Selling Expenses have been decreasing.

In the above two Illustrations, the conclusions do not help us in any way to understand the reasons clearly about the changes in figures.

(2) *Relative comparison.* When the figures in comparative statements are changed into percentages, the comparison is known as *relative comparison.*

Illustration 3. In Illustration 2, if relative comparison is to be made, the Profit and Loss Accounts for the years ended on 31st March, 1989 and 1990 would appear as follows :

	Year ended 31st March, 1990	Year ended 31st March, 1989	Increase or (Decrease)	Increase or (Decrease) in percentage
	Rs.	Rs.	Rs.	
Sales	6,40,000	4,80,000	1,60,000	33.33
Less Cost of Goods Sold	3,56,000	2,48,000	1,08,000	43.55
Gross Profit	2,84,000	2,32,000	52,000	22.41
Less Administrative Expenses	1,28,000	88,000	40,000	45.45
Selling Expenses	72,000	84,000	(12,000)	(14.29)
Interest Charges	3,200	4,800	(1,600)	(33.33)
	2,03,200	1,76,800	26,400	14.97
Net Profit before Income Tax	80,800	55,200	25,600	46.38
Less Income Tax @ 50%	40,400	27,600	12,800	46.38
Net Profit after Income Tax	40,400	27,600	12,800	46.38

Note: Figures within brackets indicate "decreases".

Draw your conclusions from the above comparative statement.

Solution :

1. Whereas sales have increased by 33.33%, cost of sales has correspondingly increased by 43.55%. The increase is more by 10.22%. This should set the management to investigating the causes of increase in cost of sales. This means the increase in sales was relatively expensive in terms of the cost of goods sold.
2. Administrative expenses have increased by 45.45% compared to increase in sales of 33.33%. Administrative expenses are more or less a fixed overhead and such heavy increase in administrative expenses must be a cause of concern.
3. Selling expenses have come down by 14.29% in spite of increase in sales by 33.33%. This is a welcome trend. This may be due to efficiency of sales personnel or this may also point out that in 1989 heavy sales expenses were incurred to introduce some new product in the market. The cause should be investigated.
4. Interest charges have come down by 33.33%. This means that some loans have been partly or fully paid off. This is a favourable sign.
5. Decrease in selling expenses and interest charges account for about one-fourth of increase in profits.

Illustration 4. The following Balance Sheets of Rajni Steel Ltd. are given for the years ending on 31st March, 1989 and 1990 :

(Figures are in thousands)

Liabilities	31st March, 1989	31st March, 1990	*Assets*	31st March, 1989	31st March, 1990
	Rs.	Rs.		Rs.	Rs.
SHARE CAPITAL			FIXED ASSETS		
Equity Share Capital	1,000	2,000	Land	200	600
RESERVES AND SURPLUS			Building	400	800
			Machinery	300	900
Capital Reserve	50	100	Other Fixed Assets	100	150
General Reserve	300	250	INVESTMENTS		
SECURED LOANS			Subsidiary		
12% Debentures	100	200	AB Ltd.	50	50
CURRENT LIABILITIES			Immovable Properties	400	200
Creditors	600	410	CURRENT ASSETS		
			Cash	100	10
			Debtors	300	100
			Stock	200	150
	2,050	2,960		2,050	2,960

Draw a comparative Balance Sheet showing increases and decreases both in absolute figures and in percentages, and then analyse these figures and percentages, giving your interpretation of the changes.

Solution :

COMPARATIVE BALANCE SHEET OF RAJNI STEEL LTD.
as on 31st March, 1989 and 1990

(Figures are in thousands)

	31st March, 1989	31st March, 1990	Increase or (Decrease)	Increase or (Decrease) in percentage
Assets	Rs.	Rs.	Rs.	
FIXED ASSETS				
Land	200	600	400	200
Building	400	800	400	100
Machinery	300	900	600	200
Other Fixed Assets	100	150	50	50
	1,000	2,450	1,450	145
INVESTMENTS				
Subsidiary AB Ltd.	50	50	—	—
Immovable Properties	400	200	(200)	(50)
	450	250	(200)	(44)
CURRENT ASSETS				
Cash	100	10	(90)	(90)
Debtors	300	100	(200)	(67)
Stock	200	150	(50)	(25)
	600	260	(340)	(57)
Total Assets	2,050	2,960	910	44
Liabilities				
SHARE CAPITAL				
Equity Share Capital	1,000	2,000	1,000	100
RESERVES & SURPLUS				
Capital Reserve	50	100	50	100
General Reserve	300	250	(50)	(17)
	350	350	—	—
SECURED LOANS				
12% Debentures	100	200	100	100
CURRENT LIABILITIES				
Creditors	600	410	(190)	(32)
Total Liabilities	2,050	2,960	910	44

Note: Figures within brackets indicate "decreases".

Analysis and interpretation of the comparative Balance Sheet :

(1) Fixed Assets have increased by Rs. 14,50,000. This increase has been financed by issue of Share Capital of Rs. 10,00,000 and 12% Debentures of Rs. 1,00,000 and from the sale proceeds of immovable property to the tune of Rs. 2,00,000. The balance money has been found from current assets.

(2) Investments in Immovable Property have been liquidated to the tune of Rs. 2,00,000 to purchase Fixed Assets.

(3) Current Assets on 31st March, 1989 were equal to Current Liabilities. The Company could meet them as and when the Current Liabilities accrued. Current Assets on 31st March, 1990 have depleted to Rs. 2,60,000 as against Current Liabilities of Rs. 4,10,000.

(4) Cash Balance has been drawn upon to an extent as to reduce it to Rs. 10,000. This sum appears to be quite inadequate for the regular operations of the Company. Unless the Company has made arrangement for short-term funds which it can manage at a very short notice, it is playing unsafe and may land itself into difficulties.

(5) Increase of Rs. 50,000 in Capital Reserve may be due to appreciation in the value of Fixed Assets upon their revaluation.

(6) Decrease in General Reserve may be due to Net Loss in operations during the year.

The analysis of changes in the above manner, *i.e.*, comparative analysis is known as *Horizontal Analysis* as each item in the Comparative Balance Sheet is compared with each item of the previous year appearing on the same line. The figures of the earliest year are used as a base for horizontal analysis.

Horizontal analysis suffers from the limitation that it assumes that past conditions remain unchanged. But that never happens. Conditions change not only within a business enterprise (launching of new products, change of management, taking over of a new business undertaking), but also in the industry and whole economic environment within the country as well as outside the country. Horizontal analysis ignores changes both in industry conditions and general economic conditions.

COMMON-SIZE ANALYSIS

Where each item in a financial statement is expressed as a *percentage* of a single base amount (like Net Sales, Total Assets, Total Liabilities and Capital), the analysis is known as *Common-Size Analysis* or *Vertical Analysis.* This analysis emphasizes relationship between each item in the same financial statement with an appropriate base. For example, in the analysis of Profit and Loss Account, Total Net Sales is used as a base. Each item in the Profit and Loss Account is expressed as a percentage of Net Sales. Likewise in the analysis of assets side of the Balance Sheet, each item of asset is expressed as a percentage of Total Assets.

Steps in the preparation of Common-Size Statement

1. Each item in Profit and Loss Account is to be expressed as a percentage of Total Net Sales, which is taken as the base (100). For example, Sales in Illustration 2 in the year 1990 are Rs. 6,40,000 and Cost of Goods Sold is Rs. 3,56,000. The sales are treated as equivalent to Rs. 100. Now the question is what percentage is Rs. 3,56,000 of Rs. 6,40,000 which is treated as equivalent to 100. This would be found out as follows:

$$\frac{\text{Cost of Goods Sold}}{\text{Net Total Sales}} \times 100 = \frac{3{,}56{,}000}{6{,}40{,}000} \times 100 = 55.63\%$$

Likewise, what percentage are administrative expenses of Total Sales, can be found out as follows :

$$\frac{1{,}28{,}000}{6{,}40{,}000} \times 100 = \quad 20.00\%$$

2. Each item on the assets side of Balance Sheet is to be expressed as a percentage of Total Assets which is taken as the base (100). For example, in Illustration 4, Total Assets in the year 1990 are Rs. 29,60,000. This total is taken as the base and is treated as equivalent to 100. Now the question is: What percentage is Rs. 6,00,000 (the value of Land) of Rs. 29,60,000. This can be found out as follows :

$$\frac{\text{Land}}{\text{Total Assets}} \times 100 = \frac{6{,}00{,}000}{29{,}60{,}000} \times 100 = 20.27\%$$

Likewise, what percentage are Fixed Assets of Total Assets can be found out as follows :

$$\frac{24{,}50{,}000}{29{,}60{,}000} \times 100 = 82.77\%$$

3. Each item on the liabilities side of Balance Sheet is to be expressed as a percentage of Total of Capital and Liabilities which is taken as the base. For example, 12% Debentures (amount Rs. 2,00,000) in 1990 are 6.75% of Total of Capital and Liabilities (Rs. 29,60,000). This is calculated as follows:

$$\frac{2{,}00{,}000}{29{,}60{,}000} \times 100 = 6.75\%$$

The following two Illustrations will explain the steps involved in the preparation of Common-Size Statement.

Illustration 5. In Illustration 2, convert the Profit and Loss Accounts of Software Ltd. for the years ended on 31st March, 1989 and 1990 into a Common-Size Profit and Loss Account for comparison purpose. Use Total Net Sales as a base for calculations.

Solution :

COMMON-SIZE PROFIT AND LOSS ACCOUNT OF SOFTWARE LTD.
for the years ending on 31st March, 1989 and 1990

	Year ended 31st March, 1989		Year ended 31st March, 1989	
	Amount	% of Sales	Amount	% of Sales
	Rs.		Rs.	
Sales	6,40,000	100.00	4,80,000	100.00
Less Cost of Goods Sold	3,56,000	55.63	2,48,000	51.67
Gross Profit	2,84,000	44.37	2,32,000	48.33
Less Administrative Expenses	1,28,000	20.00	88,000	18.33
Selling Expenses	72,000	11.25	84,000	17.50
Interest Charges	3,200	.50	4,800	1.00
	2,03,200	31.75	1,76,800	36.83
Net Profit before Income Tax	80,800	12.62	55,200	11.50
Less Income Tax @ 50%	40,400	6.31	27,600	5.75
Net Profit after Income Tax	40,400	6.31	27.600	5.75

Illustration 6. In Illustration 4, convert the Balance Sheets of Rajni Steel Ltd. for the years ending on 31st March, 1989 and 1990 into a Common-Size Statement for comparative analysis, using Total Assets, and Total Liabilities and Capital as the bases for calculation.

Solution :

COMMON-SIZE BALANCE SHEET OF RAJNI STEEL LTD.
for the years ending on 31st March, 1989 and 1990

(Figures are in thousands)

	Year ended 31st March, 1989		Year ended 31st March, 1990	
	Amount	% of Total Assets	Amount	% of Total Assets
Assets	Rs.		Rs.	
FIXED ASSETS				
Land	200	9.76	600	20.27
Building	400	19.51	800	27.03
Machinery	300	14.63	900	30.40
Other Fixed Assets	100	4.88	150	5.07
	1,000	48.78	2,450	82.77

(Contd.)

	Rs.		Rs.	
INVESTMENTS				
Subsidiary AB Ltd.	50	2.44	50	1.69
Immovable Properties	400	19.51	200	6.76
	450	21.95	250	8.45
CURRENT ASSETS				
Cash	100	4.88	10	.34
Debtors	300	14.63	100	3.38
Stock	200	9.76	150	5.06
	600	29.27	260	8.78
Total	2,050	100.00	2,960	100.00
Liabilities				
SHARE CAPITAL				
Equity Share Capital	1,000	48.78	2,000	67.57
RESERVES AND SURPLUS				
Capital Reserve	50	2.44	100	3.38
General Reserve	300	14.63	250	8.45
	350	17.07	350	11.83
SECURED LOANS				
12% Debentures	100	4.88	200	6.75
CURRENT LIABILITIES				
Creditors	600	29.27	410	13.85
Total	2,050	100.00	2,960	100.00

The object of vertical analysis is to compare the financial results of two or more firms or compare the results of a firm with industry average. The Common-Size Statement expresses the items in a financial statement in relative terms.

TEST QUESTIONS

1. What is the importance to management of comparative statements ?

2. What are the various measurement bases that can be used by a financial statement analyst ?

3. Are historical comparisons in any way useful to a financial statement analyst ?

4. What is goal norm comparison of financial statements ? Illustrate it by taking an imaginary example.

5. What are the objects of intra-firm comparison of financial statements ?

6. What is comparative financial statement analysis ? What objects are achieved by it ?

7. Take two imaginary Balance Sheets of a company as on 31st March, 1989 and 1990 and make absolute comparison of figures in the two Balance Sheets.

8. What is relative comparison and in what way is it superior to absolute comparison ?

9. What are Common-Size Financial Statements ? Draw one Common-Size Statement of Profit and Loss Account for the years ending on 31st March, 1989 and 1990.

10. Write short notes on :
   (a) Comparative Balance Sheet.
   (b) Like-kind Comparison.
   (c) Goal norm Comparison.

PRACTICAL EXERCISES

1. A brief summary of Profit and Loss Accounts for the years ending on 31st March, 1989 and 1990 of Woodstock Company is given below :

	Year ending	
	31st March, 1989	31st March, 1990
	Rs.	Rs.
Sales	5,00,000	6,00,000
Cost of Goods Sold	3,00,000	3,50,000
Operating Expenses	50,000	75,000
Rate of Income Tax 50%.		

Perform a horizontal analysis of the Profit and Loss Accounts, comparing absolute figures.

2. The following Profit and Loss Accounts of Rahim Ltd. are given for the three financial years ending on 31st March, 1988, 1989 and 1990 :

	Year ending		
	31st March, 1990	31st March, 1989	31st March, 1988
	Rs.	Rs.	Rs.
Sales	6,00,000	10,00,000	8,00,000
Cost of Goods Sold	5,50,000	7,00,000	4,50,000
Operating Expenses :			
Office Expenses	1,60,000	1,50,000	1,00,000
Selling Expenses	60,000	90,000	75,000
Miscellaneous Income	20,000	15,000	25,000
Rate of Income Tax 50%			

Perform a horizontal analysis of these Profit and Loss Accounts, comparing absolute figures.

3. Perform vertical analysis of Profit and Loss Account for the year ending on 31st March, 1990 of Woodstock Company in Question No. 1.

4. Perform vertical analysis of Profit and Loss Account for the year ending on 31st March, 1990 of Rahim Ltd. in Question No. 2.

5. From the following Trading Accounts of Red Star Ltd. for the years ending on 31st March, 1989 and 1990, draw your conclusions from comparison of figures for two years :

Dr. Cr.

	1988-89 Rs.	1989-90 Rs.		1988-89 Rs.	1989-90 Rs.
To Opening Stock	50,000	40,000	By Net Sales	5,00,000	3,00,000
To Net Purchases	2,40,000	2,00,000	By Closing Stock	40,000	1,20,000
To Wages	1,00,000	1,20,000	By Gross Loss		20,000
To Manufacturing Expenses	70,000	80,000			
To Gross Profit	80,000				
	5,40,000	4,40,000		5,40,000	4,40,000

6. The Profit and Loss Accounts of Sarla Agencies for the years ending on 31st March, 1989 and 1990 are given below :

	Year ending	
	31st March, 1989	31st March, 1990
	Rs.	Rs.
Sales	60,00,000	80,00,000
Less Cost of Sales	35,00,000	50,00,000
Gross Profit	25,00,000	30,00,000
Less Office and Administrative Expenses	4,00,000	6,00,000
Selling and Distribution Expenses	3,00,000	6,00,000
	7,00,000	12,00,000
Net Profit before Interest	18,00,000	18,00,000
Interest	4,50,000	5,00,000
Net Profit after Interest	13,50,000	13,00,000

Make a relative comparison (horizontal) of the working of two years and analyse the results.

7. The following Balance Sheets of Hardy Ltd. are given for the years ending 31st March, 1989 and 1990 :

(Figures are in thousands)

Liabilities	31st March, 1989	31st March, 1990	*Assets*	31st March, 1989	31st March, 1990
	Rs.	Rs.		Rs.	Rs.
Equity Share Capital	2,000	3,500	Land and Building	800	1,500
Capital Reserve	100	125	Plant and Machinery	1,200	1,600
14% Debentures	500	750	Investments	100	1,000
Creditors	400	625	Debtors	400	600
			Stock	300	250
			Cash	200	50
	3,000	5,000		3,000	5,000

Draw a comparative Balance Sheet showing increases and decreases both in absolute figures and in percentages, and then interpret the changes.

8. Perform a vertical analysis of the Balance Sheets in Q. 7.

UNIT 8

Cash Budget

(4 Marks)

Meaning of Budget.
Cash Budget :

(*a*) Concept
(*b*) Utility
(*c*) Preparation of Simple Cash Budget with 10-15 variables and with no

12

Budgets and Budgeting

Budgets and budgeting play a central role in profit-planning process of a business enterprise. A budget is a document, a quantified plan, that emerges from the budgeting process to achieve certain objectives. It specifies before-hand events or business activities that are expected to take place to achieve these objectives. The ultimate goal of budgeting is a forecast of the income statement and balance sheet at the end of the budget period. Thus budgeting is the planning of business activities before they occur, with a specific objective in view. In that sense, the objective of budgeting is—

(*a*) to provide management with an intelligent plan for future operations and then comparison of actual accomplishments with the pre-determined plan or budget, and

(*b*) to motivate managers at all levels to perform well.

Need for Budgeting

Planning is a core function of management. Control and co-ordination are complementary to it. Budgeting is a part of the overall profit-planning and control process.

To achieve the objectives of budgeting, management must play its role effectively. Without effective and competent management involvement, budgets and budgeting would serve no purpose other than wasting of time and money.

Some of the positive aspects of budgeting are as follows :

1. It establishes goals and targets to be achieved. The managers have perforce to be better managers to achieve these goals. How far the managers have succeeded in accomplishing the goals, can be evaluated against the budgeted performance.

2. It helps in coordination of various planning activities involved in the accomplishment of business objectives. The activities of the purchase manager purchasing raw material, production manager using raw material and finance manager who has to make timely payments can be coordinated only through budgeting.

3. It enables managers to do advance planning of activities like identifying and hiring of labour, identifying sources of raw material and their purchase, raising of finance, and effective use of money.

4. It leads to better organisation. There is identification of tasks and objectives to be achieved and how these are to be accomplished is made the responsibility of managers. The deviations from budget can be checked in good time. It should however be clearly understood that budgets and budgeting are merely tools, and if properly used they can make management more effective. And if need be, the managers must be properly educated and trained in this area of activity, particularly to adapt the budget to new conditions.

Types of Budgets

There are two types of budgets, *i.e.*,

(1) Operating budgets, and

(2) Financial budgets.

The operating budgets relate to the operational side of a manufacturing concern and include :

(*a*) Sales budget. This budget is the end result of a number of activities. The unit sales budget (*i.e.*, how many units are budgeted to be sold) affects several sub-budgets with a chain reaction effect. Sales determine volume of production which in turn affects raw material requirement and overhead expenditure involving cash outflow. The cash sales budget determines the inflow of cash, its timing and quantity.

(*b*) Production budget.

(*c*) Purchases budget.

(*d*) Direct labour budget.

(*e*) Manufacturing expenses budget.

(*f*) Overhead expenses budget.

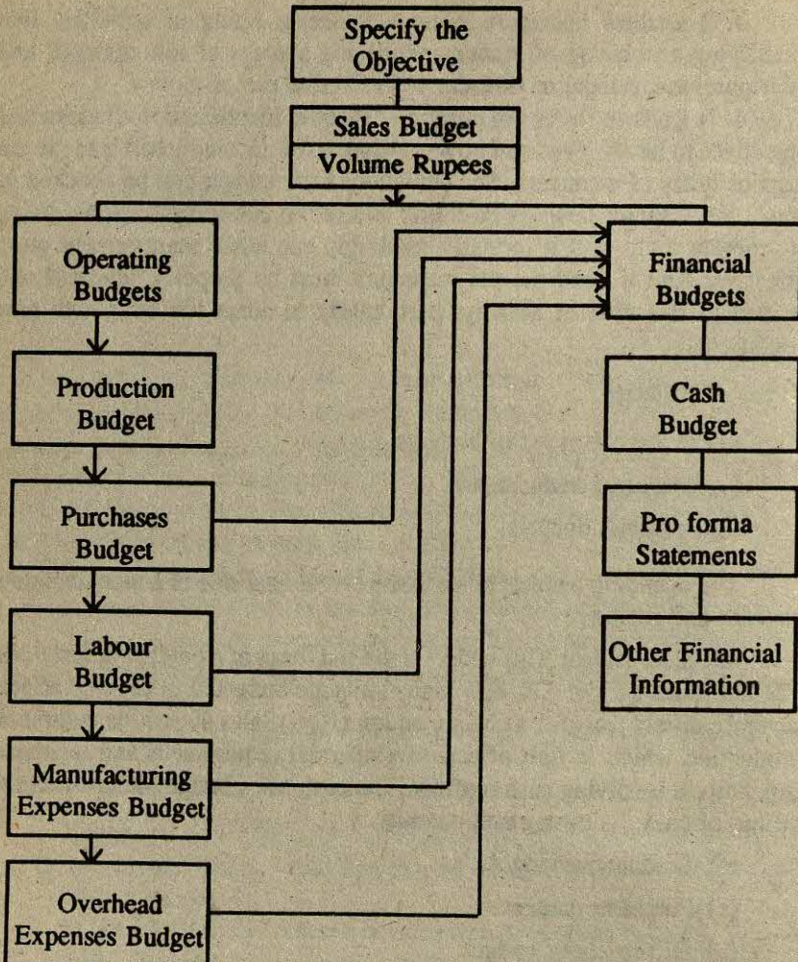
The financial budgets include :

(*a*) Cash budget which is an all important budget,

(*b*) *Pro forma* financial statements, and

(*c*) Other financial information.

The operating and financial budgets and their inter-relationship are shown in the following chart :



In this Chapter, we shall consider Cash Budget in detail :

CASH BUDGET

A large number of business transactions that take place in a business generate a *flow of cash*. The flow of cash may be into or out of the business. A cash budget shows the cash inflows and outflows expected in a budget period, and net effect of these flows on cash balances. It enables management to obtain a *preview* of the cash position of the business. The objective of preparing cash budget is to enable the management to meet its cash obligations as and when they fall due and to keep idle cash to a minimum level. If at any time cash is much in excess of requirements, this means the business is holding a sterile asset. Shortfall of cash may at times prove suicidal. It

should also be clearly understood that liquidity provided by cash holding is at the cost of profits which would otherwise have been earned by investing cash elsewhere.

Utility of cash budgets

Cash budgets help management in—

(*a*) assessing cash requirements ;
(*b*) planning short-term financing ;
(*c*) planning purchases of raw-materials ;
(*d*) developing credit policies ;
(*e*) scheduling and re-scheduling of loan payments.

Cash budgets also help in checking the accuracy of long-term forecasts and in scheduling payments in connection with capital expenditure.

METHODS OF PREPARATION OF CASH BUDGET

There are three methods of preparation of a cash budget. These are as follows :

1. Receipts and Payments Method.
2. Adjusted Profit and Loss Method.
3. Balance Sheet Method.

The first method is usually found useful for short-periods projections while the other two methods are used for long-periods projections.

In this Chapter, we shall be following the first method of preparation of a cash budget.

Basic elements. There are two basic elements to a cash budget, namely, the inflow (receipt) of cash and the outflow (payment) of cash. Control over both inflows and outflows is essential for proper cash management.

The principal inflow of cash for a business comes from *sales*. The accuracy of cash receipts forecast therefore depends on accuracy of the sales forecast. If all sales are for cash, cash receipts forecasts create no problem. If sales are for cash and credit, budgeting cash receipts from customers involves an element of uncertainty. This budgeting depends on terms of sale and customers' past behaviour in paying their debts. If customers pay in time, cash receipts forecast becomes easier. Even where the customers pay late, the management can, if it knows the debt paying habits of its customers, make a fair estimate of cash inflow. But where the customers are erratic in making payments, the whole exercise of cash budgeting may go haywire. Still by keeping some margin for these erratic customers, the management may, on the basis of past experience, determine the inflow of cash fairly accurately. The exercise is worth the game even though management may sometimes go wrong, because the gains are much more compared to effort involved.

Cash payments budget is essentially linked with cash receipts budget. The ideal position is that management should make all payments in time. The management also knows that delay in making certain payments would involve penalties and sometimes avoidable embarrassment. Such payments like taxes, salaries and wages, repayment of loans when due, payment of bills receivable, must be made in time. In making payments to trade creditors, margin for some delay may be kept (and this is a typical behaviour like that of customers who delay payments).

CASH RECEIPTS BUDGET

Cash Receipts Budget deals with inflow of cash. The major sources of cash inflow are :

(1) Cash sales and collection of accounts receivable (debtors and bills receivable) arising out of credit sales.

(2) Dividend and interest income.

(3) Borrowing—both long-term and short-term.

(4) Disposal of fixed assets.

(5) Raising of equity capital.

We shall now discuss these sources of cash inflow

(1) Cash Sales and Accounts Receivable. The most important source of cash in a business is sales. Sales budget does not indicate as to when cash will flow in. The sales may be for cash or on credit. If sales are for cash, the inflow is immediate. If they are on credit, as is generally the case in most of the manufacturing companies, cash inflow cannot be predicted very accurately. If credit sales are made to known customers, cash inflow can be fairly accurately predicted on the basis of their past paying behaviour. If credit sales are made to new customers, it may be a little difficult to determine cash inflow. Yet the past experience here may prove to be a reasonably good guide. A simple illustration will explain the point.

Illustration 1. Prepare a Cash Receipts Budget of Ramakrishna Co. for the quarter April-June, 1989 from the following information :

Balance of Debtors on 1st April, 1989.
Sales forecast for the months of April, May and June are Rs. 40,000, Rs. 60,000 and Rs. 50,000 respectively.

The average of last 4 years' sales shows that 60% sales are for cash and 40% sales are on credit and that the credit sales in any month are realised in the following month. The sales for the month of March, 1989 are Rs. 80,000.

Solution:

CASH RECEIPTS BUDGET for quarter ending on 30th June, 1989

	April, 1989	May, 1989	June, 1989	Total
	Rs.	Rs.	Rs.	Rs.
Cash from :				
(*a*) Cash Sales	$\frac{60}{100} \times 40{,}000$ = 24,000	$\frac{60}{100} \times 60{,}000$ = 36,000	$\frac{60}{100} \times 50{,}000$ = 30,000	90,000
(*b*) Credit Sales	$\frac{40}{100} \times 80{,}000$ = 32,000	$\frac{40}{100} \times 40{,}000$ = 16,000	$\frac{40}{100} \times 60{,}000$ = 24,000	72,000
Total Cash Receipts	56,000	52,000	54,000	1,62,000

Lag. It means period of time by which something is delayed. If cash from debtors (to whom goods were sold on credit) is expected to be recovered, on an average, one month from the date of sale, we say there is a 'lag' of one month in period of credit allowed to debtors. Likewise if there is a 'lag' of half-month in any payment, this means 50% payment is made in the current month and 50% payment is made in the following month.

By applying 'lag' factor, we can estimate expected receipts and payments in any month.

Illustration 2. From the data given in the previous Illustration, prepare a Cash Receipts Budget if the following further information is given :

80% of the credit sales in any month are realised, on an average, one month from the date of sale and 20%, on an average, two months from the date of sale. Sales for the month of February, 1989 are Rs. 65,000

Solution :

CASH RECEIPTS BUDGET for the quarter ending on 30th June, 1989

	April, 1989	May, 1989	June, 1989	Total
Cash from:	Rs.	Rs.	Rs.	Rs.
(*a*) Cash Sales	$\frac{60}{100} \times 40{,}000$ = 24,000	$\frac{60}{100} \times 60{,}000$ = 36,000	$\frac{60}{100} \times 50{,}000$ = 30,000	90,000

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(b) Credit Sales	From February Sales:	From March Sales:	From April Sales:	
	$\frac{20}{100} \times \frac{40}{100} \times 65{,}000$ = 5,200	$\frac{20}{100} \times \frac{40}{100} \times 80{,}000$ = 6,400	$\frac{20}{100} \times \frac{40}{100} \times 40{,}000$ = 3,200	14,800
	From March Sales:	From April Sales:	From May Sales:	
	$\frac{80}{100} \times \frac{40}{100} \times 80{,}000$ = 25,600	$\frac{80}{100} \times \frac{40}{100} \times 40{,}000$ = 12,800	$\frac{80}{100} \times \frac{40}{100} \times 60{,}000$ = 19,200	58,600
	54,800	55,200	52,400	1,62,400

The Budget can also be prepared in the following manner :

CASH RECEIPTS BUDGET for the quarter ending on 30th June, 1989

Month of Sale	Sales	Month of Collection				
		February	March	April	May	June
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
February	65,000	39,000 (60% of 65,000)	20,800 (80% of 26,000)	5,200 (20% of 26,000)		
March	80,000		48,000 (60% of 80,000)	25,600 (80% of 32,000)	6,400 (20% of 32,000)	
April	40,000			24,000 (60% of 40,000)	12,800 (80% of 16,000)	3,200 (20% of 16,000)
May	60,000				36,000 (60% of 60,000	19,200 (80% of 24,000)
June	50,000					30,000 (60% of 50,000)
				54,800	55,200	52,400

Two more factors are to be taken into account as regards inflow of cash from sales. These factors are

(a) cash discount, and
(b) bad debts.

If 2% cash discount for payment within a month is allowed, the inflow of cash from credit sales will be 98% of the credit sales. This discount is not availed of by all the customers. Let us say this discount is availed of on 50% credit sales on average in the month following the credit sale. Then cash inflow from credit sales in the next month is 99% (100 – 2% of 50) of gross amount due that month and 100% in the following months.

Illustration 3. In Illustration 2, cash discount @ 2% is allowed if cash is received in the next month (*i.e.*, in the month next to month of sale) but no cash discount is allowed if cash is received in the second month following sale.

Prepare a Cash Receipts Budget.

Solution :

CASH RECEIPTS BUDGET for the quarter ending on 30th June, 1989

	April, 1989	May, 1989	June, 1989	Total
	Rs.	Rs.	Rs.	Rs.
Cash from: (*a*) Cash Sales	60% of 40,000 = 24,000	60% of 60,000 = 36,000	60% of 50,000 = 30,000	90,000
(*b*) Credit Sales	<u>From Feb. Sales:</u> 20% of (40% of 65,000) = 5,200	<u>From March Sales:</u> 20% of (40% of 80,000) = 6,400	<u>From April Sales:</u> 20% of (40% of 40,000) = 3,200	14,800
	<u>From March Sales:</u> 80% of (40% of 80,000) *Less* 2%, *i.e.*, 25,600 – 512 = 25,088	<u>From April Sales:</u> 80% of (40% of 40,000) *Less* 2%, *i.e.*, 12,800 – 256 = 12,544	<u>From May Sales:</u> 80% of (40% of 60,000) *Less* 2%, *i.e.*, 19,200 – 384 = 18,816	56,448
Total	54,288	54,944	52,016	1,61,248

Likewise if there are any estimated bad debts they will be shown as a deduction from the amount receivable in cash, *i.e.*, the net amount will be taken into account.

(2) Dividend and Interest Income. This source of cash can be fairly accurately estimated. The inflow of cash from this source will depend upon the company's investments and return expected from them. The dividend and interest income is generally received on fixed dates generally and hence there is no difficulty in estimating cash inflow from this source.

(3) Borrowing. Borrowing for short-term may be to bridge some temporary gap when there may be shortage of cash due to some emergency. Long-term borrowing will be a part of the overall financing plan.

(4) Disposal of Asset. If there is any proposed disposal of some fixed asset during the budget period, cash will flow in. An estimated amount of cash inflow from this source may be included in the Cash Receipts Budget for the period.

(5) Raising of Equity Capital. Inflow of cash from this source is again a part of the overall financial planning.

Illustration 4. The estimated sales of X Ltd. for the months of April, May and June, 1989 are Rs. 5,00,000, Rs. 8,00,000 and Rs. 12,00,000 respectively. Cash sales are 20% of the total sales. The receivables are expected to be collected as follows: 50% one month from the date of sale, 30% two months from the date of sale and 20% three months from the date of sale. The company had placed Rs. 10,00,000 in fixed deposit with a private from @ 18% p.a. on 1st July, 1988. The interest is received on the 7th of every month. Dividends received in the month of June are Rs. 12,000. An obsolete machine is anticipated to realise Rs. 20,000 in May, 1989.

Prepare a Cash Receipts Budget for the quarter ending on 30th June, 1989. Sales for the months of January, February and March, 1989 are Rs. 10,00,000, Rs. 9,00,000 and Rs. 7,00,000.

Solution :

CASH RECEIPTS BUDGET for the quarter ending on 30th June, 1989

	April, 1989	May, 1989	June, 1989	Total
	Rs.	Rs.	Rs.	Rs.
1. Cash Sales	20% of 5,00,000 = 1,00,000	20% of 8,00,000 = 1,60,000	20% of 12,00,000 = 2,40,000	5,00,000
2. Credit Sales or Accounts Receivable	From January Sales: 20% of (80% of 10,00,000) = 1,60,000	From February Sales: 20% of (80% 9,00,000) = 1,44,000	From March Sales: 20% of (80% of 7,00,000) = 1,12,000	4,16,000
	From February Sales: 30 % of (80% of 9,00,000) = 2,16,000	From March Sales: 30% of (80% of 7,00,000) = 1,68,000	From April Sales: 30% of (80% of 5,00,000) = 1,20,000	5,04,000

(Contd.)

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	April, 1989	May, 1989	June, 1989	Total
	From March Sales: 50% of (80% of 7,00,000) = 2,80,000	From April Sales: 50% of (80% of 5,00,000) = 2,00,000	From May Sales: 50% of (80% of 8,00,000) = 3,20,000	8,00,000
	7,56,000	6,72,000	7,92,000	22,20,000
Other Sources				
Interest	15,000	15,000	15,000	45,000
Dividend			12,000	12,000
Sale of Machine		20,000		20,000
	7,71,000	7,07,000	8,19,000	22,97,000

CASH PAYMENTS OR DISBURSEMENTS BUDGET

The cash payments or disbursements made by a business during a period may be for—

(*a*) *purchases—both cash and credit.* If purchases are on credit, the payment is to be made to suppliers within a certain period.

(*b*) *labour*. This involves payment of salaries and wages to workers employed in the factory.

(*c*) *manufacturing expenses* like factory rent, lighting, power etc.

(*d*) *office and administrative expenses* like salaries to office staff, stationery, rent and other miscellaneous expenses.

(*e*) *selling and distribution* expenses like salaries to sales staff, delivery van expenses, advertisement and publicity.

(*f*) *financial expenses* like payment of interest.

(*g*) *repayment of loans.*

(*h*) *purchase of capital assets.*

(*i*) *distribution* (appropriation) of profits like payment of dividend.

(*j*) *miscellaneous items* like payment of sales tax, excise, income tax and other levies by the Government or any local authority, deposit of provident fund.

From budgeting point of view, the casn payments to be budgeted for a period may be categorised under the following two heads :

(1) *Liabilities carried over from a previous period* (like payment to supplier of goods, repayment of a loan instalment), and

(2) *Current period costs.* If any payments of costs can be postponed to next period, they are shown as a deduction. Current period costs may be

fixed costs (known as overheads) like Manager's salary, factory and office rent or variable costs which vary with volume of production, like raw material.

It should be clearly understood that while preparing Cash Payments Budget we take into account cash expenses (like payment of rent, salaries etc. to be paid in cash) and not non-cash expenses (like depreciation) because in case of ***non-cash expenses*** there is no outflow of cash.

Another important point to be borne in mind while preparing Cash Payments Budget is the priority of payments. There are certain payments which must be made in priority to other payments. These include, for example, payment of Government dues, taxes, repayment of loans, salaries and wages, rent etc. Timely payment of these dues helps a business in avoiding penalties. The only leeway that a business has in preparing its Cash Payments Budget is that it can delay payment to its trade creditors, like our trade debtors delay payment to us. Unless there are some really emergent circumstances, delayed payments bring a bad name to the business. If possible, short-term funds should be arranged to make timely payments. If there is often delay in recovering payment from trade debtors, Cash Receipts Budget should be revised in the light of receipt schedule of trade debtors. However the approach should be to speed up receipts and slow down disbursements. But slowing down should not be at the cost of establishing reputation in the market as a bad paymaster.

The following Illustrations will explain, step by step, the preparation of Cash Payments Budget.

Illustration 5. X Ltd. starts its business on 1st March, 1989 and plans to start production from 1st April, 1989. Prepare its Cash Payments Budget for raw material purchase and payment to labour for the quarter ending on 30th June, 1989 :

Production budget :

April	10,000 units
May	12,000 units
June	14,000 units

Raw Material budget :

April	25,000 kg.
May	30,000 kg.
June	30,000 kg.

The terms of payment settled with supplier are that for raw material supplied in any month, payment will be made on the 7th of the following month. The price fixed for raw material for the quarter is Rs. 2 per kg.

Labour cost per unit of production is Rs. 4 payable 75% in the month of production and the balance on the 7th of the following month.

Solution :

CASH PAYMENTS BUDGET FOR RAW MATERIAL
for the quarter ending on 30th June, 1989

	April, 1989	May, 1989	June, 1989	Total
	Rs.	Rs.	Rs.	Rs.
Raw Material	—	2 x 25,000 = 50,000	2 x 30,000 = 60,000	1,10,000
Labour	75% of (4 x 10,000) = 30,000	25% of (4 x 10,000) = 10,000	25% of (4 x 12,000) = 12,000	
		75% of (4 x 12,000) = 36,000	75% of (4 x 14,000) = 42,000	1,30,000
Total	30,000	96,000	1,14,000	2,40,000

Illustration 6. Taking the facts of Illustration 5, prepare Cash Payments Budget if the following additional information is given :

Fixed annual factory overheads Rs. 1,64,000. Of this amount Rs. 20,000 is annual depreciation.

Variable factory overheads Rs. 2 per unit.

The overheads will be paid in the month of production itself.

Solution:

CASH PAYMENTS BUDGET FOR PRODUCTION COST
for the quarter ending on 30th June, 1989

	April, 1989	May, 1989	June, 1989	Total
	Rs.	Rs.	Rs.	Rs.
Raw Material	—	50,000	60,000	1,10,000
Labour	30,000	46,000	54,000	1,30,000
Fixed Factory Overheads	1/12 of 1,44,000 = 12,000	1/12 of 1,44,000 = 12,000	1/12 of 1,44,000 = 12,000	36,000
Variable Factory Overheads	2 x 10,000 = 20,000	2 x 12,000 = 24,000	2 x 14,000 = 28,000	72,000
	62,000	1,32,000	1,54,000	3,48,000

Note : Depreciation is not taken into account as it is a non-cash expense.

Illustration 7. Taking the facts of Illustrations 5 and 6, prepare Cash Payments Budget with the following additional information :

Office overheads (annual) Rs. 60,000.

Selling and distribution overheads 15% of sales.

Office overheads for any month will be paid in the following month and 60% of selling and distribution expenses will be paid in the month of sale and the balance in the following month.

Expected sales for the months of April, May and June are 1,50,000, Rs. 2,00,000 and Rs. 2,50,000 respectively.

Solution:

CASH PAYMENTS BUDGET FOR TOTAL COST
for the quarter ending on 30th June, 1989

	April, 1989	May, 1989	June, 1989	Total
	Rs.	Rs.	Rs.	Rs.
Raw Material	—	50,000	60,000	1,10,000
Labour	30,000	46,000	54,000	1,30,000
Fixed Factory Overheads	12,000	12,000	12,000	36,000
Variable Factory Overheads	20,000	24,000	28,000	72,000
Office Overheads	1/12 of 60,000 = 5,000	1/12 of 60,000 = 5,000	1/12 of 60,000 = 5,000	15,000
Selling and Distribution Overheads	60% of (15% of 1,50,000) = 13,500	40% of (15% of 1,50,000) = 9,000	40% of (15% of 2,00,000) = 12,000	34,500
		60% of (15% of 2,00,000) = 18,000	60% of (15% of 2,50,000) = 22,500	40,500
Total	80,500	1,54,000	1,93,500	4,38,000

Important Points

In practice Cash Receipts Budget and Cash Payments Budget are not prepared separately but are consolidated into one budget, known as Cash Budget. While preparing a Cash Budget for a company or firm, the following points should be borne in mind :

1. Cash Budget always starts with the opening balance of cash.
2. It includes all expected receipts and payments during the budget period irrespective of the fact whether they are revenue or capital.

3. Cash receipts from accounts receivable and cash payments to accounts payable are estimated by applying a suitable 'lag' factor. For example, it may be estimated that 50% of credit sales in a month will be realised within one month after sale, 40% within the second month and 10% within the third month. Likewise this 'lag' factor may be applied while estimating outflow of cash on account of cash payment to accounts payable.
4. Operating expenses (like wages, salaries, rent, etc.) are assumed to be payable in the month in which they are incurred if nothing is given in the question as to their mode of payment.
5. Non-cash charges or expenses (like depreciation) are not shown in the Cash Budget. This is because there is no outflow of cash.
6. It should be borne in mind that Cash Budget includes only estimates or forecast of future cash flows. The actual cash flows may deviate from the estimates or forecast.

Illustration 8. Prepare a Cash Budget of Taurus Company Ltd. for the half-year ending on 30th September, 1989.

	Rs.
Cash and Bank Balance on 1st April, 1989	1,47,000
Estimated sales : April, 1989	5,00,000
In May and June, sales are expected to rise by 10% and 20% over previous month's sale. Then for the next three months sales are likely to remain static. 40% sales are estimated to be for cash. 50% of credit sales are estimated to be collected, on an average, one month from the date of sale and balance 50%, on an average, two months from the date of sale.	
Monthly Rental Income	20,000
Anticipated receipts in the month of July from sale of an obsolete machine.	30,000
Interest to be received in the month of June	15,000
A call of Rs. 2.50 due on 40,000 shares to be received in July	
Estimated Raw Material Purchases. April Rs. 4,00,000 ; May Rs. 2,50,000 ; June Rs. 3,00,000 ; July Rs. 3,00,000 ; August Rs. 2,50,000 ; September Rs. 2,60,000. The payments for these purchases are made 50% down and 50% next month.	

Other anticipated payments :

Wages and Salaries Rs. 1,30,000 per month
Manufacturing Expenses Rs. 1,20,000 per month
Office and Selling Expenses Rs. 25,000 per month
Tax payment due in August Rs. 50,000
Dividend to be paid in July Rs. 40,000
A Machine worth Rs. 2,00,000 is scheduled to be purchased in August.
Repayment of Instalment of Loan (including interest) in September Rs. 2,50,000

Additional information :

Sales for February and March, 1989 are Rs. 4,50,000 and Rs. 6,00,000

Purchases for March, 1989 Rs. 2,20,000.

Solution :

CASH BUDGET FOR TAURUS CO. LTD.
for the half-year ending on 30th September, 1989

	April	May	June	July	August	Sept.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Opening Balance	1,47,000	97,000	67,000	1,31,000	2,93,000	1,73,000
Receipts :						
Cash Sales	2,00,000	2,20,000	2,64,000	2,64,000	2,64,000	2,64,000
Received from Debtors	3,15,000	3,30,000	3,15,000	3,63,000	3,96,000	3,96,000
Rent	20,000	20,000	20,000	20,000	20,000	20,000
Interest			15,000			
Call on Equity Capital				1,00,000		
Sale of Machine				30,000		
Total	6,82,000	6,67,000	6,81,000	9,08,000	9,73,000	8,53,000
Payments :						
Cash Purchases	2,00,000	1,25,000	1,50,000	1,50,000	1,25,000	1,30,000
Payment to Suppliers	1,10,000	2,00,000	1,25,000	1,50,000	1,50,000	1,25,000
Wages and Salaries	1,30,000	1,30,000	1,30,000	1,30,000	1,30,000	1,30,000
Manufacturing Expenses	1,20,000	1,20,000	1,20,000	1,20,000	1,20,000	1,20,000
Office and Selling Expenses	25,000	25,000	25,000	25,000	25,000	25,000
Tax					50,000	
Dividend				40,000		
Purchase of Machine					2,00,000	
Repayment of Loan						2,50,000
Total	5,85,000	6,00,000	5,50,000	6,15,000	8,00,000	7,80,000
Total Receipts	6,82,000	6,67,000	6,81,000	9,08,000	9,73,000	8,53,000
Less Payments	5,85,000	6,00,000	5,50,000	6,15,000	8,00,000	7,80,000
Cash Balance	97,000	67,000	1,31,000	2,93,000	1,73,000	73,000

Working notes:

		Rs.
(1) Sales for the month of May	Rs. 5,00,000 + 10% =	5,50,000
Sales for the month of June	Rs. 5,50,000 + 20% =	6,60,000
(2) Cash sales for the month of April	40% of Rs. 5,00,000 =	2,00,000
Cash sales for the month of May	40% of Rs. 5,50,000 =	2,20,000
Cash sales for the months of June to September	40% of Rs. 6,60,000 =	2,64,000

(3) Cash received from Debtors in :

			Rs.
April —	From February sales	= 50% of [Rs. 4,50,000 − (40% of 4,50,000)]	
		= 50% of (Rs. 4,50,000 − Rs. 1,80,000)	
		= 50% Rs. 2,70,000 =	1,35,000
	From March Sales	= 50% of [Rs. 6,00,000 − (40% of Rs. 6,00,000)]	
		= 50% of (Rs. 6,00,000 − Rs. 2,40,000)	
		= 50% of Rs. 3,60,000 =	1,80,000
			3,15,000
May	— From March Sales	= 50% of [Rs. 6,00,000 − (40% of Rs. 6,00,000)]	
		= 50% of (Rs. 6,00,000 − Rs. 2,40,000)	
		= 50% of Rs. 3,60,000 =	1,80,000
	From April Sales	= 50% of [Rs. 5,00,000 − (40% of Rs. 5,00,000)]	
		= 50% of (Rs. 5,00,000 − Rs. 2,00,000)	
		= 50% of Rs. 3,00,000 =	1,50,000
			3,30,000

In the same manner cash received from debtors for the months of June, July, August and September may be worked out.

(4) If in any month, expected payments are more than expected receipts, temporary arrangement of short-term funds (like bank overdraft) will have to be made.

Illustration 9. From the following estimated data, calculate the amount expected to be paid on account of the following items during the months of October, November and December, 1989 :

(*a*) Wages ;

(*b*) Factory Overheads ;

(*c*) Administrative Overheads ;

(*d*) Purchases.

Month	Wages	Factory Overheads	Administrative Overheads	Purchases
	Rs.	Rs.	Rs.	Rs.
August	20,000	16,000	8,000	2,00,000
September	22,000	18,000	10,000	2,50,000
October	24,000	19,000	12,000	3,00,000
November	23,000	15,000	11,000	2,20,000
December	28,000	21,000	13,000	3,50,000

Lag in payment of Wages $\frac{1}{4}$ month

Lag in payment of Factory Overheads $\frac{1}{2}$ month

Lag in payment of Administrative Overheads 1 month

Lag in payment to creditors 2 months.

Solution :

CHART SHOWING EXPECTED PAYMENTS

during the quarter ending on 31st December, 1989

Month	Wages		Factory Overheads		Administrative Overheads	Purchases
		Rs.		Rs.	Rs.	Rs.
Oct.	$^1/_4$ of 22,000	5,500	½ of 18,000	9,000		
	$^3/_4$ of 24,000	18,000	½ of 19,000	9,500		
		23,500		18,500	10,000	2,00,000
Nov.	$^1/_4$ of 24,000	6000	½ of 19,000	9,500		
	$^3/_4$ of 23,000	17,250	½ of 15,000	7,500		
		23,250		17,000	12,000	2,50,000
Dec.	$^1/_4$ of 23,000	5,750	½ of 15,000	7,500		
	$^3/_4$ of 28,000	21,000	½ of 21,000	10,500		
		26,750		18,000	11,000	3,00,000
Total		73,500		53,500	3,300	7,50,000

TEST QUESTIONS

1. What do you understand by the terms 'budget' and 'budgeting' ?
2. What is the need for budgeting ?
3. What are the benefits of a budget ?
4. What is a budget ? What are its different types ?

5. Write a note on 'operating budgets' and 'financial budgets'.

6. What is a Cash Budget ? What is its utility for a business enterprise ?

7. What are two basic elements of a cash budget ?

8. What is a Cash Receipts Budget ? What items are usually included in it ?

9. What is a Cash Payment Budget ? What items are included in it ?

10. How is a Cash Budget prepared ? How is it different from Receipts and Payments Account ?

11. What information is needed for the preparation of a Cash Budget ?

12. Construct an imaginary Cash Budget, showing therein 5 items of cash inflow and 10 items of cash outflow.

PRACTICAL EXERCISES

1. Prepare a Cash Receipts Budget for the half-year ending on 30th September, 1989 from the following particulars.

Sales for April, 1989 are estimated Rs. 50,000. Sales for the next two months are expected to rise at the rate of 10% over the previous month's sales. Sales for the remaining three months are expected to remain static.

Monthly rental income received on the 7th of the next month is Rs. 5,000.

An old machine which has become obsolete is scrapped. It is likely to be sold for Rs. 10,000 in the month of August.

40% sales are for cash. The receivables from credit sales are expected to be collected one month from the date of sale. Sales for the month of March, 1989 are Rs. 40,000.

(Anticipated cash receipt from April through September Rs. 49,000, Rs. 57,000, Rs. 62,200, Rs. 65,500, Rs. 75,500 and Rs. 65,500 respectively. Total Rs. 3,74,700)

2. From the following information relating to Everbusy Co. Ltd., prepare Cash Receipts Budget for the half-year ending on 31st December, 1989 :

Month	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Sales	50,000	70,000	60,000	65,000	75,000	80,000	78,000	76,000

Cash and credit sales are expected to be 20% and 80%. The receivables from credit sales are expected to be collected as follows : 60% of receivables, on an average, one month from the date of sale, and the balance in two equal instalments over the next two months.

Interest on NTPC Bonds amounting to Rs. 5,000 is to be received in August.

A call of Rs. 3 per share is to be received on 50,000 equity shares of Rs. 10 each in the month of November.

(Anticipated cash receipt from July through December: Rs. 53,600, Rs. 66,000, Rs. 67,000, Rs. 72,000, Rs. 2,26,400, Rs. 77,450 respectively. Total Rs. 5,62,440)

3. (*a*) Prepare a Cash Receipts Budget for the quarter ending on 31st March, 1990 from the following forecast of sales of Smriti Ltd. :

		Rs.
January	1990	2,00,000
February	1990	2,50,000
March	1990	2,20,000

20% of the Company's sales are for cash and the balance are credit sales which are paid in the month following sale. Trade debtors on 31st December, 1989 are Rs. 1,60,000. The Company gives a 2% discount on cash sales.

(Anticipated cash receipt: January Rs. 1,99,200; February Rs. 2,09,000; March Rs. 2,43,120. Total Rs. 6,51,320)

(*b*) Find out sales for the month of December, 1989 and also ascertain the estimated balance of trade debtors on 31st March, 1990.

(Sales for December, 1989 Rs. 2,00,000. Balance of Debtors on 31st March, 1990 Rs. 1,76,000)

4. (*a*) Prepare a Cash Receipts Budget for the quarter ending on 31st December, 1989 from the following forecast of sales of Ayushi Ltd. :

		Rs.
October	1989	5,00,000
November	1989	5,60,000
December	1989	6,00,000

The following additional information is given :

Cash sales 20% of total sales.

Credit sales 80% of total sales.

Discount on cash sales 2%.

60% of amount due on account of credit sales is realised in the month following sale (and the terms of sale are 1% cash discount within one month) and 40% balance is realised in the second month following sale.

Sales for August and September were Rs. 6,00,000 and Rs. 5,50,000 respectively.

(Anticipated Cash receipt: October Rs. 5,51,360; November Rs. 5,23,360; December Rs. 5,43,712. Total Rs. 16,18,432)

(*b*) Find out the balance of trade debtors on 30th September and 31st December, 1989.

(Debtors on: 30th September Rs. 6,32,000; 31st December Rs. 6,59,200)

5. (*a*) Prepare a Cash Payments Budget for the half year ending 30th September, 1989 from the following particulars relating to Rajiv Enterprises manufacturing shirts:

Opening balance of Cash and Bank Rs. 45,000

Raw Material purchases :

	Rs.		Rs.
April	50,000	May	60,000
June	60,000	July	70,000
August	65,000	September	80,000

40% purchases are for cash and 60 on credit for which payment is made in the following month. Purchases for March, 1989 are Rs. 58,000.

Factory overheads are estimated to be 50% of cost of raw material purchased in any month. Office and distribution overheads are 50% of Factory Overheads.

A new machine costing Rs. 45,000 is anticipated to be purchased in September, 1989.

(*b*) Find out the balance of trade creditors on 31st March 1989 and on 30th September, 1989.

(Anticipated cash payments from April through September: Rs. 92,300, Rs. 99,000, Rs. 1,05,000, Rs. 1,16,500, Rs. 1,16,750, Rs. 1,79,000 respectively. Total Rs. 7,05,550)

6. Prepare a Cash Payments Budget of ABC Company for the half-year ended 31st March, 1990 from the following details:

The Company anticipates to purchase raw materials worth Rs. 2,00,000 each month in October and November 1989, materials worth Rs. 2,50,000 in December, 1989 and January, 1990 each month and materials worth Rs. 3,00,000 in February and March, 1990 each month. 40% payment for these purchases is to be made in the month of purchase and balance in equal monthly instalments in the next two months. Purchases for August and September are Rs. 1,80,000 and Rs. 1,90,000 respectively. Miscellaneous Cash purchases are anticipated to be Rs. 2,000 per month from October to December, 1989 and Rs. 3,000 per month for the next three months.

Other anticipated payments are :

Wages Rs. 50,000 per month

Manufacturing expenses Rs. 20,000 for the first month. These expenses are expected to rise Rs. 2,000 every month.

Office and selling expenses Rs. 30,000 per month. Instalment of loan repayment (including interest) to be paid in December, 1989 Rs. 55,000

(Anticipated cash payments from October, 1989 through March, 1990: Rs. 2,93,000, Rs. 3,01,000, Rs. 3,81,000, Rs. 3,44,000, Rs. 3,81,000, Rs. 3,98,000 respectively. Total Rs. 20,98,000)

7. Prepare a Cash Payments Budget of Rama Bros. for the year ending 31st March, 1990 from the following particulars which are anticipated for the year :

Month	Purchases	Wages	Factory Overheads	Office Overheads	Selling Overheads
1989	Rs.	Rs.	Rs.	Rs.	Rs.
April	80,000	8,000	10,000	5,000	4,000
May	82,000	8,800	12,000	6,000	5,000
June	84,000	8,000	11,000	6,000	6,000
July	90,000	10,000	12,000	7,000	7,000
August	96,000	12,000	13,000	7,000	7,000
September	98,000	12,000	14,000	8,000	6,000
October	88,000	11,000	12,000	6,000	5,000
November	86,000	10,000	10,000	7,500	5,000
December	92,000	12,000	11,000	8,500	6,000
1990					
January	96,000	14,000	15,000	8,000	7,500
February	98,000	16,000	16,000	8,200	8,000
March	90,000	12,000	10,000	8,400	7,000

Lag in payment to Creditors	2 months
Lag in payment of Wages	$\frac{1}{4}$ month
Lag in payment of Factory Overheads	$\frac{1}{2}$ month
Lag in payment of Office Overheads	1 month
Lag in payment of Selling Overheads	1 month

The other information given to you is as follows :

Purchases for February and March, 1989 are Rs. 88,000 and Rs. 85,000 respectively

Wages for March, 1989	Rs. 8,000
Factory Overheads for March, 1989	Rs. 9,000
Office Overheads for March, 1989	Rs. 6,000
Selling Overheads for March, 1989	Rs. 5,000

(Anticipated cash sales through April, 1989 to March, 1990: Rs. 1,16,500, Rs. 1,13,600, Rs. 1,10,700, Rs. 1, 15,000, Rs. 1,24,000, Rs. 1,29,500, Rs. 1,34,250, Rs. 1,30,250, Rs. 1,22,500, Rs. 1,27,000, Rs. 1,38,500, Rs. 1,38,200 respectively. Total Rs. 15,00,000)

8. Prepare a Cash Budget of ABC Ltd. for the year ended 31st March, 1990 from the following forecasts for the year :

Sales anticipated for April, 1989 are Rs. 1,00,000. These are anticipated to rise 10% after every three months upto December 1989. Sales for the first quarter of 1990 are anticipated to be Rs. 1,50,000 per month. 50% sales are anticipated to be for cash, subject to a cash discount of 2%. The balance 50% is anticipated to be realised in the month following sale. Sales for March, 1989 are Rs. 90,000.

A final call of Rs. 5 per share on 1,00,000 equity shares is to be received in November, 1989.

Other miscellaneous receipts are anticipated to be Rs. 5,000 per month on an average.

The anticipated payments are :

Purchases of raw material Rs. 40,000 each month from April through September, 1989 and Rs. 50,000 from October, 1989 through March, 1990. Purchases for March, 1989 are Rs. 36,000. Payments are anticipated to be made 40% in the month of purchase and 60% in the following month.

Wages for the first half-year are Rs. 40,000 per month and for the second half-year Rs. 50,000 per month.

Factory Overheads are to be 20% of wages.

Office Overheads are to be Rs. 5,000 for the first quarter, Rs. 6,000 for the second quarter and Rs. 10,000 for the next half-year.

Selling Overheads are to be 10% of the sales.

Dividend to be paid in October, 1989 Rs. 50,000

A machine is to be purchased in November, 1989 for Rs. 4,00,000.

Instalment of loan to be paid in March, 1990 Rs. 1,00,000.

Cash and Bank Balance on 1st April, 1989 is Rs. 95,000.

(*Cash Balance on 31st March, 1990 Rs. 86,670*)

9. Prepare a Cash Budget of Cleanex Ltd. for the half-year ending on 31st March, 1990 from the following particulars :

Balance of Cash and Bank on 1st October, 1989 Rs. 1,20,000

Sales for the six months are forecast as follows :

		Rs.
October,	1989	3,00,000
November,	1989	4,20,000
December,	1989	3,60,000
January,	1989	3,30,000
February,	1990	2,70,000
March,	1990	3,00,000

It is anticipated that 40% of each month's sales will be for cash and that the balance will be sold on account. 50% of the credit sales will be collected in the following month and the other 50% will be collected in the second month following sale. Sales for August and September, 1989 are Rs. 1,50,000 and Rs. 2,25,000 respectively.

The production budget in units and the purchases budget in units for the six months is as follows :

Month		Production Budget	Purchases Budget
October,	1989	48,000 units	Rs. 39,000
November,	1989	33,000 units	Rs. 15,000
December,	1989	30,000 units	Rs. 30,000
January,	1990	27,000 units	Rs. 18,000
February,	1990	24,000 units	Rs. 42,000
March,	1990	36,000 units	Rs. 36,000

Labour per unit of production	Rs. 2
Variable Overhead per unit of production	Re. 1
Annual fixed overhead Rs. 1,92,000 of which	

Rs. 48,000 is depreciation

Office Overheads per month	Rs. 10,000
Selling and Distribution Overheads 10% of sales.	
Interest Payment in December, 1989	Rs. 1,00,000
Purchase of Machinery in January, 1990	Rs. 5,00,000
Payment of Dividend in March, 1990	Rs. 2,00,000

All expenses except purchases are paid in the month in which they are incurred. Purchases are paid in the month following purchase. Purchases for September, 1989 are Rs. 60,000.

(Cash Balance on 31st March, 1990 Rs. 91,000)